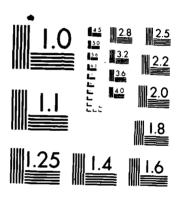
FINANCIN NONAPPROPRIATED FUND (NAF) MAJOR CONSTRUCTION (U) DELTA RESEARCH CORP ARLINGTON VA R RAST 09 MAR 85 DRC-FR-412-1-USA MDA903-84-C-0480 AD-A161 813 1/2 F/G 13/3 UNCLASSIFIED - NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

FINANCING NONAPPROPRIATED FUND (NAF) MAJOR CONSTRUCTION

FINAL REPORT March 28, 1985

The views, opinions, and findings contained in this report are those of the authors and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other official documentation.

SUBMITTED TO:

Department of the Army Adjutant General DAAG-NFF-M, CPT J. COKLEY Alexandria, VA 22331

Under Contract No.: MDA903-84-C-0480

Contract Amount: \$97,126

SUBMITTED BY:

DELTA RESEARCH CORPORATION 1401 Wilson Boulevard, Suite 600 Arlington, VA 22209 (703) 841-1900



DISTRIBUTION STATEMENT A

Approved for public releases
Distribution Unlimited



UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM				
1. REPORT NUMBER 2. GOVT ACCESSION NO.	2 DECIDIENTIS CATALOG				
701642 AD-A/6/1	<i>13</i>				
	5. TYPE OF REPORT & PERIOD COVERED				
Financing Nonappropriated Fund (NAF) Major Construction	Research Report; Contract				
	6. PERFORMING ORG. REPORT NUMBER				
7. AUTHOR(s)	FR-412-2-USA 8. CONTRACT OR GRANT NUMBER(#)				
	MDW 903-84-C-0480				
Richard Rast, Vice President JWN Division	FIDW 903-04-C-0400				
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS				
Delta Research Corporation	AREA & WORK UNIT NUMBERS				
1401 Wilson Boulevard, Suite 600					
Arlington, Virginia 22209	OMA 9				
11. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE				
US Army Community and Family Support Center	March 9, 1985/May 29, 1985				
ATTN: DACF-RM	13. NUMBER OF PAGES				
Alexandria, Virginia 22331-0580	325				
14. MONITORING AGENCY NAME & ADDRESS(If different from Controlling Office)	15. SECURITY CLASS. (of this report)				
	Unclassified				
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE N/A				
16. DISTRIBUTION STATEMENT (of this Report)	,				
Approved for public release; distribution unlimited	1				
	•				
	}				
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from	m Report)				
Same	1				
18. SUPPLEMENTARY NOTES					
	}				
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)					
Active Army, Community and Family Support, Financia	al Management, Cost.				
Morale, Quality of Life.	indiagonomy, oost,				
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)					
The basic objective was to determine what condition					
private sector initially finance NAF Major Construction and convey title of					
the facility to the Government over a pre-negotionated contractual period of					
time. Additionally, provide a model for evaluating	y, reverse interesting different activedities for				
private/Government joint ventures for NAF Construct	ion.				

DD 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Date Entered)

TABLE OF CONTENTS

		<u>p</u>	age
SECTION	1	EXECUTIVE SUMMARY	1-1
		1.1 Purpose and background to study	1-1
		1.2 Financing Strategy Selection	1-2
		1.3 Conclusions and Recommendations	1-3
		1.4 Study Team	1-4
	~		
SECTION	2	INTRODUCTION	2-1
		2.1 Background and Purpose of Study	2-1
		2.2 Activities Performed in The Study	2-1
		2.2.1 TASK 1 - Financing Strategy Development	2-1
		2.2.2 TASK 2 - Private Sector Analysis	2-3
		2.2.3 TASK 3 - Recommendations for Strategy Implementation	2-4
		2.3 Facility Types Used for Analysis	2-4
SECTION	3	RECOMMENDATIONS FOR STRATEGY IMPLEMENTATION	3-1
		3.1 General	3-1
		3.2 Develop Market/Economic Capability	3-1
		3.3 USACFSC Management Organization	3-3
		3.4 Financing Strategy Implementation Plan	3-3
SECTION	4	FINANCING STRATEGIES	4-1
		4.1 Strategy Groundrules	4-1
		4.2 Financing Strategies	4-2
		4.2.1 Mortgage Financing	1-3
		4.2.2 Bond Issues	4-3
		4.2.3 Lease With No Contractor Participation4	1-4
		4.2.4 Lease With Contractor Responsible For Building Maintenance	4-5
		4.2.5 Lease With Maintenance and Operation Contract	4-6

TABLE OF CONTENTS Continued

SECTION	4	Cont'	d.	<u>Page</u>
			4.2.6	Franchise Arrangements4-7
			4.2.7	Full Operation of Facility as a Private Venture (Concessionaire)4-8
SECTION	5	STRA	TEGY EV	ALUATION PROCEDURES5-1
		5.1	Introd	uction5-1
		5.2	Define	Strategy5-1
		5.3	Econom	ic Evaluation5-2
		5.4	Army Q	ualification Evaluation5-5
		5.5	Privat	e Sector Interest Evaluation5-5
SECTION	6	ANAL	YSIS OF	ARMY INTANGIBLE CONCERNS
		6.1		uction6-1
		6.2		ch6-2
		6.3	• •	ure of Interviews6-2
		6.4		nt MWR Survey Data5-3
		6.5		ption of Activities6-4
			6.5.1	Clubs6-5
			6.5.2	Guesthouses6-5
			6.5.3	Golf Club Houses6-5
			6.5.4	Bowling Centers
			6.5.5	Package Beverage Stores6-7
			6.5.6	Skill Development Centers6-3
			6.5.7	Youth Activity Centers6-9
			6.5.8	Recreation Centers6-10
		6.6	Intang	ible Concerns6-10
		6.7	Army I	ntangible Factors6-13
		6.8		ing of The Factors6-15

5.7.3

TABLE OF CONTENTS Continued

		<u>Page</u>		
SECTION 7	PRIVATE SECTOR MARKET ANALYSIS	7-1		
	7.1 Introduction	Introduction7-1		
	7.2 Structure of Meetings	7-2		
	7.3 Private Sector Interest Factor	s7-3		
	7.4 Market Analysis - Delta			
	7.4.1 Franchisors	7-8		
	7.4.2 Owner-Operators			
	7.4.3 Developers	7-19		
	7.4.4 AAFES			
	7.5 Market Analysis Activities - C	oldwell Banker7-26		
	7.5.1 Building Construction C	ontractors7-26		
	7.5.2 Syndicators	7-36		
	7.5.3 Pension Fund	7-37		
	7.5.4 Pension Fund Manager	7-37		
	7.5.5 Investment Bankers	7-38		
	7.5.6 Operators	7-39		
SECTION 8	TAX/LEGAL ISSUES ASSOCIATED WITH ST	RATEGIES8-1		
	8.1 Introduction	8-1		
	8.2 Tax Exempt Status of The NAFI.	8-1		
	8.3 Depreciation Rules for Tax Exe	mpt Property8-2		
	8.4 Possessory Use Tax	8-3		
	8.5 Revenue Generated From Ground	Leases8-4		
	8.6 Davis-Bacon Act	8-4		
		Accesion Fer		
		NTIS CRUZI TO		
APPENDIX A	User's Manual	Urannorwed		
		Just It hation		
APPENDIX 8	Cost Data For Cash Flow Model	By		
		Elst ibetest/		
	-i i i -	Availabalty Codes		
		Dist Avail and/or Special		
		A-1		

1. EXECUTIVE SUMMARY

1.1 PURPOSE AND BACKGROUND TO STUDY

The purpose of this study was to define alternate means of funding non-appropriated fund major construction (NAF-MC) projects that would involve long term private sector financing. Much of the physical plant which supports Army Morale, Welfare, and Recreation (MWR) activities is obsolete and the Army currently maintains a backlog of construction requirements with a value in excess of \$1 billion. The alternative financing strategies developed under this study are envisioned as a means of reducing the backlog more quickly than NAF funding combined with traditional design and construction techniques would allow. A secondary objective of the study was to define areas where private sector participation can encourage the introduction of new MWR operating concepts which may improve quality of service to the soldier and increase NAF operating revenues thus allowing other activities to be developed.

Delta Research Corporation conducted this study under contract No. MDA903-84-C-0480 during the period from October, 1984 through March, 1985 for the U.S. Army Community and Family Support Center (USACFSC). The study was divided into three tasks: 1) the development of financing strategies, 2) a private sector market survey to determine the capabilities and interest level of private sector entities to respond to the financing strategies, and 3) development of recommendations for financing strategy implementation based on the results of Tasks 1 and 2. This report presents a description of our findings. In addition, an additional requirement was added to the contract to study the feasibility of using the financing strategies to fund projects in the Federal Republic of Germany. The results of that study will be submitted under separate cover during May, 1985.

1.2 FINANCING STRATEGY SELECTION

The financing strategies developed for this study were generally divided into two groups: 1) private sector financing with Army operation of facilities and 2) private sector financing and operation of facilities. Financing strategies included in the first group are mortgage and bond placements, long term leases, and franchise/lease combinations. Financing strategies within the second group are long term leases with an operation contract and long term concession arrangements with concessionaire providing the facility. Each strategy has certain advantages and disadvantages. Determining the most appropriate strategy for a particular project requires consideration of the objectives of each party involved in the transaction combined with input regarding the actual facility type in question.

Three parties will have a direct interest in the financing strategies if they are implemented; the Army, the private sector company (which provides financing land operation if applicable), and the Treasury which is concerned with potential tax revenues to be generated by the strategies. Delta defined a three step evaluation process for selecting the most advantageous strategy which considers the objectives of each party.

- First a cash flow model was developed which defines expenses and income to all three parties over the life of the project and evaluates the net present value of all Army income and expenses, the net present value of tax receipts to the Treasury, and the after tax internal rate of return for the private investor. This model allows the Army to maximize its income (or minimize its cash outflow) while meeting the private investor's minimum attractive rate of return requirements for investing in projects of this type, and assuring that the project is not a net loss to the Treasury.
- Second, a series of eighteen "Army intangible factors" were developed to evaluate the financing strategy's responsiveness to the qualitative issues associated with Army MWR facilities. These issues deal primarily with the quality of service provided to the Army family. Relative weights were assigned for each of the factors for each facility type under consideration. A methodology was developed for determining the "qualitative score" for each strategy under consideration for a particular project.

• Third, a series of "private sector interest factors" were developed to evaluate the level of appeal of a particular strategy to potential private sector investors. This evaluation is important since the level of interest within the private sector should have a direct impact on the number and quality of private sector responses to Army solicitation initiatives. This in turn will impact the quality of service provided to the Army and in many cases the cost.

The evaluation process yields results in three independent areas, i.e. project economics, Army intangible concerns, and private sector interest. It is left to the Army to determine the importance of each area, relative to the others, and to determine the most appropriate strategy for each project.

1.3 CONCLUSIONS AND RECOMMENDATIONS

The concept of private sector financial and operational participation in Army MWR construction projects has advantages in terms of economics and quality of services provided to the Army family. If implemented and administered properly, the strategies can reduce the NAF-MC backlog more quickly than traditional methods can, improve and/or update the operational features of MWR facilities in keeping with the real needs and desires of the Army family, and increase NAF revenues and profitability while maintaining the value and affordability of MWR activities to the soldier. In order to maximize these advantages, several key issues need to be considered and acted on:

- Facility designs and operating concepts should be based on a sound market analysis which addresses the <u>real</u> requirements of the Army customer base.
- The entire MWR management structure at the USACFSC and installation level needs to be organized with a business perspective regarding the development and operation of MWR facilities.
- A strategy implementation plan should be developed which identifies projects, responsibilities, schedules, etc. required to actually implement strategies.

These areas are explained in Section 3 of the report.

1.4 STUDY TEAM

The study team consisted of two firms and one consultant, with responsibilities as follows:

<u>Richard R. Rast</u> - Project Manager - overall study approach design, definition of financing strategies, tax and legal issues, strategy evaluation model, private sector market survey.

Roger Preciado - cost flow model development.

Richard W. Cramer, AIA, Consulting Architect - intangible factor development, market survey.

Coldwell Banker Real Estate Consultation Services - Market Survey

- 2. INTRODUCTION

2.1 BACKGROUND AND PURPOSE OF THE STUDY

The U.S. Army Community and Family Support Center (USACFSC) is responsible for planning, programming, and administering the non-appropriated fund major construction (NAF-MC) program for construction of facilities to support the Army morale, welfare, and recreation (MWR) program. Traditionally, NAF-MC projects have been funded on a cash basis from NAF reserves. However, NAF reserves have not been adequate to finance all needed projects and USACFSC currently maintains a backlog of unfunded NAF-MC requirements with a value in excess of \$1 billion. The objective of this study was to define alternative means of funding NAF-MC projects using private sector financing. A secondary emphasis of the study was to define strategies which would enhance MWR operating concepts through the introduction of private sector market initiatives.

The study approach was divided into three tasks: (1) definition of financing strategies, (2) a private sector market survey to determine the interest level and capabilities of private companies to participate in the strategies, and (3) the development of recommendations for strategy implementation. An additional requirement was added to review the feasability of using the financing strategies for projects in Germany. This report presents a detailed summary of our findings for construction in the U.S. A separate report will be submitted dealing specifically with German applications during May, 1985.

2.2 ACTIVITIES PERFORMED IN THE STUDY

2.2.1 TASK 1 - Financing Strategy Development

The development of MWR/NAF financing strategies required that the Delta Research Corporation project team conduct activities which generally

fall into four broad categories: 1) developing an understanding of the NAF/MWR operating environment from both a financial and functional perspective, 2) a detailed review of the tax and legal environment as it relates to NAFIs and commercial real estate, 3) the development of a cash flow model which can be used to predict the actual income and expenses associated with an individual project, and 4) the development of a series of intangible factors relating to the MWR mission which should be considered along with financial issues in selecting appropriate financing strategies for actual NAF-MC projects. These activities are described in the following sections.

2.2.1.1 <u>Understanding of the MWR/NAF Environment</u>. The project team conducted a series of interviews and reviewed a number of documents in order to gain an understanding of the function of NAF facilities.

Members of the project team toured NAF facilities and conducted interviews with MWR personnel at Ft. Belvoir, Virginia; Ft. Jackson, South Carolina; Ft. Meade, Maryland; Ft. Irwin, California; Ft. Stewart, Georgia; and Bolling AFB in Washington, D.C. Interviews were conducted with USACFSC personnel responsible for various MWR activities at HQDA. Also, an interview with AAFES was conducted in Dallas in order to discuss their Burger King franchises. A number of MWR/NAF related documents and financial statements were reviewed by the project team including design criteria for buildings, regulations and procedures for operating NAFIs, annual NAF and APF financial statements for facilities, DD1391s for proposed facilities, and the NAF-MC five year plan. This information was used in the analysis of Army intangible concerns and private sector interests. In addition, these documents and data were also used in the development of financing strategies and as financial input to the cash flow model for the economic evaluation described in Section 5.

2.2.1.2. Review of Tax and Legal Environment. The Delta project team conducted an intensive review of Federal tax laws and regulations as they relate to private sector financial sources who develop, own and/or operate

income producing real property. In addition, a preliminary review of other statutes which might impact financing strategies was conducted and incorporated in the cash flow model for the economic evaluation and the financing strategies described in Section 4.0. There are a number of provisions within the current tax law which can have a significant impact on these strategies. In addition, the current political environment is conducive to considering major changes in the Federal tax laws which could negate many of the tax advantages for investors who own income producing property, thus potentially increasing the cost to the Army for leasing facilities. These issues are discussed in more detail in Section 4.0. The rest of the activities performed are presented as separate sections (Sections 5.3 and 6).

2.2.2 Task 2 - Private Sector Market Analysis

The main activity of Task 2 was to conduct a market analysis of potential investors. The objectives of this analysis were: (1) to determine the interest level within the private sector of the financing strategies; (2) to determine the types of investor/operators likely to bid each strategy and building type; (3) to obtain information in order to increase strategy acceptability; (4) to define minimum standards (I.R.R., project size, etc.) of the private sector; and (5) to determine the willingness of the private sector to submit proposals.

A number of companies were contracted in order to meet the above objectives. Face-to-face conversations and telephone interviews were used to collect results. Companies were categorized in seven types: franchisors, owner-operators, developers, building contractors, syndicators, pension funds, and investment bankers. A complete description of the private sector market analysis is provided in Section 7.

In addition to the market analysis, an update of the financing strategies as well as of the intangible concerns was conducted in Task 2. Also, an enhancement of the cash flow model and its cost data was performed.

2.2.3 TASK 3 - Recommendations for Strategy Implementation

The objective of Task 3 was to develop recommendations for implementating the financing strategies. Recommendations address the most appropriate strategies for particular facility types as well as needed changes in perception and organization of MWR facility designs and operation. Further explanation is provided in Section 3 and in Section 5.

2.3 FACILITY TYPES USED FOR ANALYSIS

The strategies described in Section 4 are applicable to all NAF facility types but for the purposes of review and analysis, seven categories of facilities were selected. The facility types considered as well as the potential size of the facility, based on DoD and Army design criteria, are as follows (Note that the facility types may change based on the market analysis):

1) Bowling Centers

6	lanes	6,600s f
30	lanes	31,000sf

(An additional 300SF per 4 lanes is allowed for a game room. Snack bars and grills are included.)

2) Clubs

EM Clubs	10,000sf	150,000s f
NCO Clubs	4,400sf	149,000sf
Officers Clubs	4,400sf	72,700sf

(Note financial data for different club types are considered separately and in effect clubs are actually three facility types.)

Guest Houses

10,000sf 100,000sf

375sf/unit with kitchenette or 350sf/unit without. Add circulation, mechanical, recreation, and administration space.

4) Golf Clubs

9 hole course

6,500sf club house + 1,500sf

equipment building

36 hole course

10,000sf club house + 3,000sf

equipment building

5) Package Beverage Stores

900sf - 10,000sf

6) Skill Development Centers

Arts & Crafts

2,000sf - 70,000sf

Auto Crafts

1,000sf - 42,000sf

(Note - these functions are combined in some cases so financial data is combined. These facilities will be treated separately where possible for analysis).

7) Youth Centers

6,700sf - 18,500sf

3. RECOMMENDATIONS FOR STRATEGY IMPLEMENTATION

3.1 GENERAL

The financing strategies defined in Section 4, if implemented and managed properly, offer the opportunity to reduce the NAF-MC backlog more quickly than traditional methods will allow and improve the quality of facilities and services provided by the MWR activities without reducing the value of service to the soldier. In order to maximize the advantages that the various strategies offer, the Army needs to consider and act on several areas which are beyond the scope of this effort. Specifically, we have identified three areas which need to be considered:

- Market/economic analysis of facility requirements
- USACFSC management organization
- Financing strategy implementation plan

These topic areas are explained in the following sections.

3.2 DEVELOP A MARKET/ECONOMIC ANALYSIS CAPABILITY

All of the financing strategies which we have developed require that the proposed facilities be built at an economically viable size and that they respond to the requirements of the Army community being supported by the facility. The procedures currently used for programming facilities are inadequate for assessing these requirements.

The operating concepts currently used for most MWR facilities were developed during a period when soldiers had less money and mobility than they do today. Therefore, many activities are operated under the pretense that the best service to the soldier equates to the least expensive service. In fact, a large portion of the eligible MWR users prefer to use private sector facilities such as clubs, hotels, and restaurants even though they are generally more expensive because the operating concepts are more closely

aligned to their desires and needs. This reduces potential NAF revenues and in effect reduces the quality of service to the soldier. In order to overcome these problems, a specific market analysis capability should be developed to include the following:

- The unique characteristics of the Army market at the particular installation needs to be better defined. Characteristics of the market (demographics) such as the size of each age group, the disposable income and spending habits, and the amount and type of recreational time available based on the installation's mission.
- The dependent, retiree, and other eligible-user market must be defined along the same parameters. The location where family groups live (on post or off post) must be considered along with how the location will influence the use of the various facilities.
- The "competition" for various activities in the private community must also be assessed in conjunction with the above. Is the soldier going off-post for recreation because similar activities are not available on post? If so, should the activity be offered? How and at what cost? If the activity is offered on post, why isn't it used by these customers? Price? Atmosphere? Closer to home (for families living off post)? Quality? Name?

The requirements and specific parameters (e.g., area, number of rooms, type of dining, etc.) for the new activity should be defined using these inputs. Particular emphasis should be placed on defining the new activity on economic terms using profitability as a criteria. Innovative concepts should be encouraged using private sector experience as an example where possible. This is particularly true for activities such as clubs, guest houses, bowling alleys, and golf club houses where the customer's perception of value is closely linked to market trends and environment. The potential for including up-to-date private sector marketing concepts through franchises, operating contracts, or concessions should be considered.

3.3 USACESC MANAGEMENT ORGANIZATION

The current management organization for Morale Welfare Recreation (MWR) activities is generally not adequate for some of the strategies which have been developed. For example, hotel companies indicated that they would probably be reluctant or even unwilling to sell franchises to the Army for guest houses unless there is a strong business focus with clean lines of authority and a high profit motive. Further, it is doubtful that the overall economic objectives of the various activities can be met under the current fragmented management approach.

While we have not tried to assess the USACFSC/TAGO/NAF/DPCA management structure or its suitability for the various strategies, we feel strongly that this must be done and changes implemented prior to using the strategies or else problems and potential failure may result.

3.4 FINANCING STRATEGY IMPLEMENTATION PLAN

Because the financing strategies proposed in this report are different from design and construction methods traditionally used, strategy implementation plan should be developed for all of the projects in the current five year plan. The plan should take into account the overall financial capability of the NAF-MC account, the current status and priorities of each project, and the most practical strategy for each project. Projects should be grouped to take maximum advantage of the financing strategies proposed. For example, if a number of guest houses are to be built using a franchise arrangement, the schedule should be defined so that the hotel company and the Army can work together effectively to bring the hotels 'on-line' in an orderly manner.

The schedule for the entire NAF-MC five year plan should include the following for each project:

- The type of strategy selected.
- The critical activities to be performed by the Army and the contractor including all government reviews and approvals (i.e., planning, design concept, detailed design, construction, outfitting, move-in/start-up, training of USACFSC employees, etc.).
- The duration of each activity.
- The cost of each activity to the Army (for budgeting purposes)

We suggest that a critical path method (CPM) schedule of key activities be prepared for each project or group of projects aggregated together, and that a master schedule be prepared for the entire five year plan. Note that there might be 15 to 25 "key" activities which should be scheduled on a project or group of projects. There are a number of inexpensive automated scheduling packages available for IBM-PC type computers which can be used to create and update these schedules.

4. FINANCING STRATEGIES

4.1 STRATEGY GROUND RULES

The first step in defining financing strategies was to establish a set of ground rules which relate to NAF facilities, NAFI operation, and tax/legal issues. These ground rules were developed as an aid to developing strategies and were validated during the market analysis activities in Phase 2 of the study. They are presented here as a point of reference. For purposes of definition, the private sector financial source will be called the "contractor."

- All financing strategies are based on tax laws effective in October 1984.
- The Army and private sector contractors are equally capable of operating and maintaining NAF activities and facilities.
- Construction and operating costs are assumed constant whether conducted by Army or private contractor. This theory is supported by the requirement that contractors pay "prevailing wages" for services on government land so that wages paid for construction and operations will be similar for either party.
- Facilities are to be programmed and built at an economically feasible size. (This requires a market analysis on a project-by-project basis).
- All financing lease arrangements will be secured by a long-term contract between the Army and the contractor rather than with a security note since the building will not serve as effective collateral due to the location on a Government installation.

In addition to these assumptions, there are several contract clauses which will be included in each strategy to protect both the Army and the contractor.

• Termination of the contractor will be allowed for nonperformance with some form of equitable adjustment for both parties.

- The contractor will be protected from loss of income due to installation closings or major reduction in force strength.
- Contracts for lease will be saleable in the private sector although the Army can retain the right to qualify potential purchasers.
- Contracts can be terminated with the facility reverting back to the Army through mutual consent of both parties. This will require that the Army purchase the contractor's remaining interest in the property in most cases.

4.2 FINANCING STRATEGIES

There are a number of different methods of financing available to the Army for obtaining new MWR facilities including a traditional permanent mortgage, bond issues, a sale-lease back arrangement, a normal long-term lease with varying levels of operational responsibility assumed by the contractor, franchises operated by the Army, and concessionaire arrangements for a private sector company to build, operate, and receive profits from a MWR operation. Within each of these categories there are a number of options, such as, which party is responsible for managing the building design and construction, fixed-or variable-rate financing or lease payments, when and how the facility reverts back to Army ownership and control, etc.

The combination of the financing categories with these options leads to an almost unlimited number of potential financing variations. For purposes of definition, financing strategies have been defined in terms of the form of compensation paid by the Army to the contractor and the operational responsibility assumed by the contractor for the facility. Then, as part of each strategy category there are a number of options listed which are available depending on the Army's financial and operational objectives for the facility. The strategies defined in the following sections are general frameworks which have proven to be viable based on private sector input and review of NAFI operations. Application of the strategies requires the preparation of a detailed SOW and a market analysis for each project as described in Section 3 of this report.

4.2.1 Mortgage Financing

In this case the Army would design, construct and operate the facility using the traditional approach. A permanent mortgage would be secured to finance the project with the Army providing a mortgage repayment contract as collateral for the loan, thus allowing the Army to receive the money prior to construction. The Army would be responsible for all facility-related expenses including facility maintenance, operation, repairs, and improvements.

Financing Options

Fixed or Variable rate financing.

Design and Construction Options

None - the contractor will not participate in the design and construction in a mortgage arrangement so traditional Corps of Engineers design and construction procedures will be used.

4.2.2 Bond Issues

This strategy is basically the same as mortgage financing except that cash would be raised through a bond issue rather than with a mortgage. The bonds could be issued either through a syndicator, the Treasury, TAG, or directly by the NAFI. The repayment schedule for bonds is generally either as a total lump sum, including interest, at the end of the term or interest paid annually (or more frequently) with the principal to be repaid at the end of the term. This type of arrangement might create an unmanageable long-term liability for the NAFI and, therefore, may not be a reasonable strategy in the long run.

Financing Options

Periodic interest payments or total paid at term.

Design Construction Options

Same as for mortgages.

4.2.3 <u>Lease With No Contractor Participation</u>

This arrangement is also similar to a mortgage arrangement with the primary difference being that, in a lease arrangement, the contractor retains title to the building and can take advantage of the tax benefits of owning income producing real property. As in the case of mortgages, the contractor will not have any maintenance or operational responsibilities once the construction is complete. The Army would make a periodic lease payment to the contractor and would be responsible for all facilities maintenance, repairs, improvements, and operating expenses. The facility would be purchased by the Army at the end of the lease term.

Financing - Options

Fixed or variable rate lease payments.

Repurchase price can be based on a predetermined formula or allowed to float. If there is a fixed or determinable purchase price at the end of the term and the lease is for 20 years or more, then the contractor must use 40 year straight-line depreciation for tax purposes. This will impact Army lease payments and should be considered as part of this strategy.

Design and Contruction Options

The contractor can be responsible for managing design and construction. In this case, he would submit a lease proposal to the Army which would include a firm price lease arrangment prior to construction. Design quality control could be a problem. Since the contractor will have no maintenance responsibility there may be a tendency to "underdesign" buildings to reduce costs.

The Army would manage the design using traditional methods and then solicit "construct/lease" proposals from contractors.

The Army would manage both the design and construction and either solicit lease bids as a function of total construction cost or as a sale-lease back. Both of these would require that the Army finance the construction initially until the construction is completed. Also, sale-lease back arrangements between tax exempt agencies and contractors have negative tax implications to the contractor which would cause lease payments to increase.

4.2.4 Lease With Contractor Responsible for Building Maintenance

This strategy is generally the same as the previous strategy except that the contractor will assume responsibility for facility maintenance and repair in much the same way as normal commercial landlords manage office buildings and retail shopping malls. The lease contract would require the contractor to maintain the building within its scope as originally built. This would include normal operating repairs and maintenance as well as replacement of worn out building components such as air conditioning systems and roofs. This maintenance responsibility could also include housekeeping and/or maintenance of building equipment items such as dishwashers and bowling alley equipment, or these responsibilities could be retained by the Army. In addition to the maintenance responsibilities defined above, a clause would be included in the lease agreement which allows the Army to require the contractor to renovate and/or expand the facility as needs dictate and to either modify the lease payment or pay for the renovation as a single item.

There are potential advantages to this strategy as compared to the previous strategy. Because the contractor will be responsible for maintenance and repair of the facility, he will tend to properly maintain the building to avoid high-cost repairs in the future. Thus, the quality of building maintenance may tend to be higher than normal. In addition, it can be argued that the contractor will be able to provide lower cost maintenance than the Army can provide due to being unconstrained by Government purchase procedures and because contractor labor tends to be less expensive than Government labor. This cost reduction would result in a lower overall cost to the Army.

Financing Options

Same as previous strategy, plus:

Maintenance and utility requirements could be all inclusive or stipulated at a certain base level, with the Army paying for any additional requirements. This will impact the contractor's level-of-risk and the expected rate-of-return and, therefore, the cost to the Army.

Design and Construction Options

Same as previous strategy, however, the option of requiring the contractor to manage the design and construction will be more practical with this option since the contractor will also be responsible for maintenance.

4.2.5 Lease With Maintenance and Operation Contract

This strategy would require the contractor to build, maintain, and operate the facility on a contract basis. The Army's only responsibility would be to purchase goods for resale and receive revenues from facility operation so that the tax exempt status of the NAFI would be retained. The lease and maintenance portion of the contract would be the same as the previous strategy.

The operations portion of the contract would require that the contractor operate the facility according to the installation's requirements. The annual fee charged by the contractor for this portion of the contract should be renegotiated annually.

The contractor could operate the facility or this portion could be a separate contract which would be competitively bid separate from the lease/maintenance contract. Or, the lease contractor could subcontract this portion of the work and pass the cost through to the Army. The advantage of having the lease contractor responsible for facility operation is that there will not be a conflict between operations and maintenance responsibilities (i.e., who pays for what?) and some increase in overall operating efficiency can be realized by taking advantage of the overlap in responsibilities. Thus, from the Army's perspective, these contracts will be easier to manage and may result in an overall cost savings.

Design and Construction Options

Same as previous strategy.

4.2.6 Franchise Arrangements

This strategy allows the Army to take advantage of private sector management and market expertise as well as the marketing benefits of name recognition while retaining operational responsibility and revenues. This strategy would be practical for cases in which name recognition and market awareness are important considerations such as guest houses (hotels), clubs (restaurants), and bowling alleys. The advantages would be diminished for facilities such as youth centers, arts and crafts centers, and package beverage stores where name recognition is not important.

Under this strategy the Army would purchase franchise licenses from national or regional companies. The Army pays the company a percentage of gross receipts from operation of the facility in the form of a royalty fee. The company provides management training and on-site start-up personnel, but the operational and management employees are Army personnel. Generally, the company sets up a detailed set of operational criteria for the facility and reserves the right to revoke the license if these criteria are not met. The company provides advertising; supplies purchasing services for some, or all, goods; introduces new products; and provides on-going management support. These services are provided as part of the franchise royalty fee schedule.

Financing Options

The Army pays a one-time franchise fee to purchase a license for a pre-specified term. Some franchisers require that the franchise be renewed at five- or ten-year intervals with an additional fee.

The Army can pay for construction and then sell the facility to the franchiser in return for a long-term lease or the franchiser can pay for construction. (Currently AAFES pays for construction of its Burger King franchise, but has an agreement with Burger King to secure long-term lease financing for future stores.)

Design and Construction Options

The Army can manage the design and construction using franchise specification or the franchiser can perform the design and construction. The latter will generally result in a much faster project development process.

4.2.7 Full Operation of Facility as a Private Venture (Concessionaire)

This strategy would require the contractor to build, own, and operate the facility according to Army requirements as a profit-oriented venture which would not retain a tax exempt status. The contractor would

pay the Army a concessionaire fee for the right of operating the facility on the installation. These payments could take one of several forms: a lease paid to the Army for the use of the land, a flat annual payment which would be negotiated periodically, a percentage of total revenue received from facility operation, or some combination of these.

There are a number of advantages to this option as a compared to other strategies for potentially profitable ventures such as clubs, guest houses, bowling centers, and golf courses. The private sector profit incentive will be strong, thus encouraging the contractor to offer high-quality service and maintain market awareness. Also, because of the business incentive, the Army may receive more revenues through this option than through others even though the contractor will receive a large share of the profits. Finally, this option eliminates the need for a significant portion of the local Army administrative responsibility so that these facilities could be effectively managed by a central HQDA level agency.

There are some potential disadvantages to this strategy as well. It would be more difficult to control the operation of the facility with this option than with leases where the Army maintains control of the facility. It may also be very difficult to terminate a contractor for non-performance since the facilities would be paid for by the contractor.

This option would only be feasible for profitable operations such as guest houses, clubs, bowling alleys, package stores, etc., although it might be feasible to package a group of profitable and unprofitable facilities together for operation under a single contract arrangement.

Financing Options

Contractor to pay Army either a flat annual rate, lease for land, percentage of total revenue, or some combination of each in the form of a concessionaire fee. Title 10 USC 2667 states

that moneys received for rental of land under military control shall be returned to the Treasury so the revenue to the Army $\underline{\mathsf{can}}$ not be called a ground lease.

Design and Construction Options

None - The contractor would be responsible for design and construction.

5. STRATEGY EVALUATION PROCEDURES

5.1 INTRODUCTION

The following sections define a four-step procedure that should be followed in order to select the appropriate financing strategy for NAF major construction projects. These steps are:

- Define a specific strategy(ies);
- 2. Perform an economic evaluation of the strategy;
- 3. Perform a qualitative evaluation using the Army Intangible Factors; and
- 4. Perform a private sector interest evaluation.

Once these steps are completed, the Army will have a quantified evaluation of the three significant decision criteria: project economics, Army intangible concerns, and private sector interest, which should be considered in selecting the most appropriate strategy for a particular project. It is left up to the Army to determine the relative importance of each criterion, combine the scores from each, and select the appropriate strategy.

5.2 DEFINE STRATEGY

As mentioned in Section 4, there is almost an unlimited number of alternative financial strategies. Therefore, each strategy should be clearly defined in order to avoid ambiguous interpretations of responsibilities. In order to simplify, each strategy could be subdivided into four components:

Type of Design/Construction Type of Financing Type of Operation Options To facilitate strategy definition, an information checklist (Form 1) should be used. In addition to the components mentioned above, the checklist includes the project data needed to run the cash flow model, and a responsibility allocation list.

5.3 ECONOMIC EVALUATION

Once the financing strategies are clearly established, the cash flow model can be utilized in order to evaluate one strategy at a time on pure economic bases. Complete documentation of the cash flow model is provided in the User's Manual in Appendix A.

In order to run the model the analyst should follow the next sequence of basic steps:

- 1. The general data included on the information checklist (Form 1) should be gathered.
- 2. Once this information is obtained, the data is input to the computer model. Make sure that all the inputs and options agree with the previously defined strategy.
- 3. Iterate with the expected annual lease in order to find an internal rate of return of the private party equal to its minimal attractive rate of return.
- 4. This economic analysis may be performed for several strategies in order to select the one that maximizes the Army net present value. The highest Army net present value indicates the most attractive strategy in economic terms. Note that this value may be negative, indicating a loss to the Army over the life of the project.

Page: 1 of 2

INFORMATION CHECKLIST

1.0	STRA	TEGY DEFINITION		
(No c	1.1 ontract	Type of Design/Construction: or participation, turnkey, construction/des	ign manag	ement, etc.)
(Mort	1.2 gage, b	Type of Financing: onds, lease, franchise, concessionaire, etc	:.)	
(Army		Type of Operation: ional, operations contract, franchise, etc.	.)	
	1.4	Options		
		1.4.1 Inflate Lease: Yes; No; No; No	lo; able;	Fixed
		1.4.5 Depreciation Rate: Straight Line	; ACRS	
	חרכוו			
2.0	KESP	ONSIBILITIY ALLOCATION		
2.0	. KE 3PI		IRMY	PRIVATE
1.			\RMY	PRIVATE
	Initia	ITEM A	ARMY	PRIVATE
1.	Initia Annual	ITEM A l Investment/Working Capital	ARMY	PRIVATE
1.	Initia Annual Annual	ITEM A I Investment/Working Capital Operating Income	ARMY	PRIVATE
1. 2. 3.	Initia Annual Annual Annual	ITEM A I Investment/Working Capital Operating Income Other Income	\RMY	PRIVATE
1. 2. 3. 4.	Initia Annual Annual Annual Annual	ITEM A I Investment/Working Capital Operating Income Other Income Utility Expense	ARMY	PRIVATE
1. 2. 3. 4. 5.	Initia Annual Annual Annual Annual	ITEM A I Investment/Working Capital Operating Income Other Income Utility Expense Repair & Maintenance Expense	ARMY	PRIVATE
1. 2. 3. 4. 5. 6. 7.	Initia Annual Annual Annual Annual Annual	ITEM A I Investment/Working Capital Operating Income Other Income Utility Expense Repair & Maintenance Expense Service Expense	ARMY	PRIVATE
1. 2. 3. 4. 5. 6. 7.	Initia Annual Annual Annual Annual Annual Annual	ITEM A 1 Investment/Working Capital Operating Income Other Income Utility Expense Repair & Maintenance Expense Service Expense Payroll Expense	ARMY	PRIVATE
1. 2. 3. 4. 5. 6. 7. 8. 9.	Initia Annual Annual Annual Annual Annual Annual Annual Annual	ITEM A I Investment/Working Capital Operating Income Other Income Utility Expense Repair & Maintenance Expense Service Expense Payroll Expense Supply Expense Insurance Expense Administrative Expense	ARMY	PRIVATE
1. 2. 3. 4. 5. 6. 7. 8. 9.	Initia Annual Annual Annual Annual Annual Annual Annual Annual	ITEM A I Investment/Working Capital Operating Income Other Income Utility Expense Repair & Maintenance Expense Service Expense Payroll Expense Supply Expense Insurance Expense	ARMY	PRIVATE
1. 2. 3. 4. 5. 6. 7. 8. 9.	Initia Annual Annual Annual Annual Annual Annual Annual Annual Annual	ITEM A I Investment/Working Capital Operating Income Other Income Utility Expense Repair & Maintenance Expense Service Expense Payroll Expense Supply Expense Insurance Expense Administrative Expense	ARMY	PRIVATE

Page: 2 of 2

INFORMATION CHECKLIST (Continued)

3.0 PROJECT DATA

	ITEM	UNIT/MEASURE	AMOUNT
1.	Building Type	N/A	
2.	Square Footage	Ft ²	
3.	Expected Annual Operating Income	\$(1,000)	
4.	Expected Annual Other Income	\$(1,000)	
5.	Cost of Equipment	\$(1,000)	
6.	Cost of Furnishings	\$(1,000)	
7.	Construction Loan % Debt	Decimals	
3.	Construction Lost Interest Rate	Decimals	
9.	Permanent Financing Years	Years	
10.	Permanent Financing % Debt	Decimals	
11.	Permanent Financing Interest Rate	Decimals	
12.	Equipment/Inventory Loan % Debt	Decimals	
13.	Equipment/Inventory Loan Interest Rate	Decimals	
14.	Investor's Minimum Tax Rate	Decimals	
15.	Investor's State Tax Rate	Decimals	
16.	Investor's Federal Tax Rate	Decimals	
17.	Year of Sale	Years	
18.	Initial Investment	\$(1,000)	
19.	Cost of Major Improvement #1 (10 years)	\$(1,000)	
20.	Cost of Major Improvement #2 (15 years)	\$(1,000)	
21.	Construction Period	Months	
22.	Building Straight-Line Life	Years	
23.	Life of Equipment	Years	
24.	Life of Furnishings	Years	
25.	Estimated Purchase Price	\$(1,000)	
26.	Expected Inflation	Decimals	
27.	Area Cost Factor	Decimals	
23.	Construction Starting Year	Date (2 digits)	
29.	Expected Annual Lease	\$(1,000)	

5.4 ARMY QUALITATIVE EVALUATION

In addition to the economic evaluation of the strategy, some intangible factors related to the Army's concern about program quality and life enhancement issues, must be taken into consideration. A number of concerns were identified and subsequent factors developed based on interviews with MWR staff at HQS and post level. A complete explanation is provided in Chapter 6.

In order to facilitate evaluation, a master form (Form 2) is provided. Using this form, the analyst can evaluate each proposed strategy against 18 Army Intangible Factors. The user should provide information (project name, building type, etc.) in order to identify the specific project and strategy. A table containing the 18 Army Intangible Factors for five different building types is provided.

A four-column worksheet is given for performing the evaluation. The first column specifies the name and number of the factor. The weights in column (A), must be filled out from the table for the specific building type. The strategy rating column (B) must be determined by the user. These ratings must be filled out by rating strategy responsiveness to each factor on a scale from 1 to 10, where 10 is most responsive and 1 is least responsive. In the score column, the weights (A) are multiplied by the strategy rating (B) for each factor. Then, a summation of these scores should be performed. Finally, a total average should be calculated by dividing the total score column by the number of factors included. This figure should be used to compare the responsiveness to the Army Intangible Factors among different strategies.

5.5 PRIVATE SECTOR INTEREST EVALUATION

A series of 14 Private Sector Interest Factors was developed based on interviews with private companies. These factors are considered

important because attracting private sector interest in the proposed strategies will have a definite positive impact on the overall success of any project. The relative importance of the factors varies depending on the type of strategy chosen. The weights (on a scale of 1 to 10) are shown on Form 3 enclosed. The factors are defined in Section 7.3.

As in the previous form (Form 2), the user should first fill out the general information on the top of the form. The Weights in Column (A) must be filled out from the table for the specific financing type. The Strategy Rating, Column (B) must be determined by the user. These ratings must be filled out by rating strategy responsiveness to each factor on a scale from 1 to 10, where 10 is most responsive and 1 is least responsive. In the Score Column, the weights (A) are multiplied by the strategy rating (B) for each of the factors. Then, a summation of these scores is performed. Finally, a total average should be calculated by dividing the total of the Score Column by the number of factors included. This figure should be used to compare the responsiveness to the Private Sector Interest Factors among different strategies.

FORM 2

1.	Project Name:																			
2.	Building Type:										3.	Lo	cat	ion:						
4.	Strategy Descr	iptio	on:							-					-					
	5. Year of Construction:																			
				ARMY	QUA	AL I 1	rat:	IVE	EVA	LUA	TIC) N								
						F	ACT(ORS	WE I	GHT	S	(Co	lumr	1 A))					
	Building Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1.	Bowling/Golf	9	9	5	1	10	1	10	10	9	8	7	8	7	7	7	9	1	1	
2.	Youth Activity		10	10	5		10	7	9				10		9	10		10	9	
3.	Arts & Crafts	10	9	9	5	6	6	6	5		10	9	9	10	9		9	8	10	
4.	Guesthouse		10	N/A					10	8					10	5		10	N/A	
5.	Clubs	3	8	<u>5</u>	10	1	10	1	1	2	3	4	3	4	4	4		10	10	_
									•	A)				(B)			(A :	xB)	
ARMY INTANGIBLE FACTORS WEIGHTS STRATEGY SCORE																				
									•	om		,		ATI					,	
									ta	ble)					•		ive	-	
												(1				. 62 h	70113	ive	· /	_
Prom	notes Sense of i	Belon	gin	g and	P1	ace														
	elops Soldier &		_		Ī															
	ognizes Peer Gr	-																		
	gnizes Needs of			Comman	nd															
	notes Sense of I																			
	ognizes Market l																			
	reases Timelines vers Good Produ			•																
-	elops Motivation				-1.11	-62														
	notes State-of-t			iting																
	olifies Contract			strat	ion															
•	notes Depth & Ou																			
	ntains Post-to-R	-	-		•															
Prom	notes Building (Quali	ty .	and D	es i	gn														
Prov	rides Flexibili	ty to	Dе	al di	th (Cha	nge													
	gnizes Private					s														
	talizes on Exis	•																		
Reco	ognizes Mobiliza	ation	Re	qui re	ne n	ts								_	_					
								t.						Tot		2	_			
						•			r of Ave						iea	=				

1.

2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

14. 15.

16.

17. 13. THE STATE OF THE PARTY OF STATE AND SECOND PRODUCTIONS DESCRIPTIONS

| | <u>1</u> • | Project Name: | | | | | | | | | | | | | | | |
|------------|------------|--|-------------|-------------|------|------|------------|------|------|------|----------------|------------|-----|-------|-----|------|-------------|
| | 2. | Building Type: | . <u></u> . | | | | | | | 3. | L | oca: | tio | n: | | | |
| | 4. | Strategy Description: | | | | | | | | | | | | | | | _ |
| | | | | | | 5 | . Ye | ear | of | Cor | ıs t | ruct | tio | n: | | | |
| | | | | | | | | | | | | | | | | | |
| | | PR | I VAT | E SE | ECT | OR | INTE | RES | ΤE | VAL | UAT | ION | | | | | |
| - | | | | | | | | F | ACT | ORS | | | | | | | |
| | Fina | ncing Type | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| - | 1. | Mortgage/Bond | 2 | 10 | 3 | 10 | N/A | 5 | 5 | 3 | 10 | 2 | 2 | 2 | N/A | N/A | |
| | 2. | Lease | 5 | 10 | 5 | 10 | 10 | 5 | 8 | 5 | 8 | 5 | 8 | 4 | 4 | 2 | |
| | 3. | Operation/Franchise | 10 | 7 | 3 | 10 | 10 | 5 | 10 | 10 | 8 | 10 | 10 | 7 | 10 | 7 | |
| | 4. | Concession | 10 | 7 | 8 | 10 | 10 | 8 | 10 | 10 | 6 | 10 | 10 | 7 | 10 | 7 | |
| • | _ | | | | | | | | (| A) | | | | (B) | | | (A x B) |
| | PR I VA | TE SECTOR INTEREST FAC | TORS | S | | | | | WEI | GHT: | S | | STF | RATI | EGY | | SCORE |
| | | | | - | | | | | | ^om | | | | ITA | | | |
| | | | | | | | | | • | |) | 10 | | | | nons | sive) |
| | | | | | | | | | - | ,,,, | • | • | | | | • | nsive) |
| , . | - I mm. | Quality Assurance | | | | | | | | | | \ <u> </u> | | | | | |
| 1.
2. | - | anteed Return on Inves | s time | nt. | | | | | | | | | | | | | |
| 3. | | de Potential | | | | | | | | | | | | | | | |
| 4. | | ency of Guarantees | | | | | | | | | | | | | | | |
| 5. | | out Provisions | | | | | | | | | | | | | | | |
| 6. | Assu | rance Against Govnt. | Inte | rver | it i | on | | | | | | | | | | | |
| 7. | Effi | cient Project Administ | trat | ion | | | | | | | | | | | | | |
| 8. | | itment to Time Schedu | | | | | | | | | | | | | | | |
| 9. | | ncable Aggregation of | | ject | : \$ | | | | | | | | | | | | |
| 10. | | ted Competitive Biddi | | | _ | _ | | | | | | | | | | | |
| 11. | | nition of Building Eco | | | | i ty | | | | | | | | | | | |
| 12.
13. | | -to-Face Contractor Se | | | | | + c | | | | | | | | | | |
| | - | Resourcefulness in Se
ate Sector Consulting | #111 | ng r | , LO | jec | r 2 | | | | | | | | | | |
| 14. | FILV | ace sector consulting | | | | | | | | | | a. | Τ, | ot a' | = | - | |
| | | | | | 5. | , | Numbe | er i | nf i | Fact | ' O r ' | | | | | | |
| | | | | | C C | | Total | | | | | | | | | | |

6. ANALYSIS OF ARMY INTANGIBLE CONCERNS

6.1 INTRODUCTION

The intended result of the Army's quality of life and life enhancement program is reciprocal dedication to service. The Army desires to counter any negative conditions of service by providing a community environment or way of life that "takes care of its own," i.e., Army personnel and their families. The Morale, Welfare, and Recreation (MWR) program administered by the U.S. Army Community and Family Support Center (USACFSC) is a key part of this overall program.

To expedite development of community and other life enhancement services, the USACFSC is seeking to employ alternative financing strategies to help construct MWR facilities. It is expected that these strategies will also provide ways of increasing revenues to gain self-sufficiency.

Thus, the objective of this analysis was to identify intangible concerns and develop subsequent factors to help evaluate the financing strategies. The USACFSC designated the following types of MWR activities for this work:

Officer and Enlisted Clubs Guesthouses

Golf Club Houses Bowling Centers

Package Beverage Stores Skill Development Centers (1)

Youth Activity Centers Recreation Centers

(1) Arts and Crafts and Auto Self-Help

6.2 APPROACH

Interviews were conducted with headquarters staff to determine what makes up each activity, and to better understand the initiatives, or concepts, bearing on the quality-of-life issues and on the generation of income towards self-sufficiency and profits.

On-Post interviews were also conducted at the following installations to observe conditions tempered by different missions and commanders:

Ft Belvoir, VA Ft Jackson, SC Ft Meade, MD Ft Stewart, GA Ft Irwin, CA (1) Bolling AF3, DC (2)

- (1) Facilities & activities are contractor-operated
- (2) Observed self-sufficient Arts & Crafts Ctr only

At post level, facilities were toured and information collected from the Director of Personnel and Community Activities (DPCA), the Director of Engineering and Housing (DEH), and from Morale Support Activities (MSA) staff to include the Morale Support Officer and individual managers of relevant facilities on each post.

At Ft Irwin, the staff of Boeing Services International was also interviewed. Boeing currently holds the general contract for operation of most of Ft Irwin.

6.3 STRUCTURE OF INTERVIEWS

The premise behind involvement of the private sector in the financing, construction, and possible operation of MWR facilities on-post was introduced. The following alternatives were discussed prior to each interview:

(1) privately financed construction with Army (Morale Support) operation of the activity, and

(2) privately financed construction with contractor operation of the activity.

Inquiry was made about quality of service, how income was generated, and how both quality and income could be increased. Additional inquiry collected views on contractor operation of activities.

6.4 RELEVANT MWR SURVEY DATA

In 1984, the Adjutant General's Office conducted a survey to determine interest in the MWR program. Respondents were 85% male, 61% white, and 27% black. Their rank was 67% E-3, 4, 5 & 6, and 14% officer. Slightly more than 60% of the respondents lived on post. 58% of the respondents to the MWR Survey were married, underscoring the Army's emphasis on family support.

Of note, is the indication that a relatively large number of respondents do not use the activities shown below.

| Activity Type | % of Respondents That Do Not Use |
|------------------------|--|
| Bowling Centers | 40% |
| Clubs | 29% |
| Arts & Crafts Ctrs | 50% |
| Youth Activity Ctrs | 55% (1) |
| Recreation Centers | 37% |
| (1) respondents were o | only those with family members age 6-1 |

Although each individual may not want to use each and every facility, the potential for increasing use and revenues is still very apparent.

6.5 DESCRIPTION OF ACTIVITIES

This description provides some detail about the purpose, operation, and income for each activity. Facilities planned for FY87 are also shown, although each post has a number of different MWR facilities planned over several fiscal years.

6.5.1 <u>Clubs</u>

Clubs have generally been designed and operated to serve enlisted and officer personnel in separate facilities. They are intended to appeal to the junior, senior and retired, their wives and guests. Emphasis is on broadening the appeal in a reorientation towards families, and in combining resources in terms of staff, facilities, and equipment. Currently, there are more than 600 officer, NCO, and enlisted clubs in existence.

Clubs generate income from fees charged members (some enlisted clubs do not charge fees), and from sales of food and beverage. There is a high percentage (50% in some cases) of sales related to catering of events held within the club. Income is also received from activities such as bingo and the sale of arts, crafts, uniforms, etc., from which a percentage is received from the vendor or group sponsoring the sale.

Most clubs are considered to be "essential messes," i.e., kitchen/dining facilities to support feeding of assigned personnel, e.g., as in an emergency. Clubs sometime operate guestrooms and VIP quarters, or may be in close proximity to a guesthouse. Their large banquet/function rooms may be used for conferences and official functions. (Currently, this sometimes impacts income operations.) And quite often, there are swimming pools and outdoor snack bars associated with the larger clubs.

Markets vary from post to post regarding mix of junior, senior, and retired users.

| Planned clubs (FY87) | CWE (\$000) | S.F. |
|-------------------------|-------------|--------|
| FT Bliss (NCO/EM) | 8,402 | 72,687 |
| FT Dix (OFF) | 5,293 | 36,000 |
| FT Leavenworth (NCO/EM) | 2,802 | 17,609 |

6.5.2 Guesthouses

Guesthouses provide temporary accommodations for PCS personnel and their families, as well as lodging for authorized overnight guests, e.g. parents of personnel stationed on post and civilians on official business. At least part, sometimes all, of the rooms are equipped with kitchenettes and can sleep six. Usually, there are small loboy/registration areas, a vending room, offices, and service areas. Other amenities may include an indoor multi-purpose room or children's play area as well as outdoor play facilities.

Guesthouses have generally been conceived as stand-alone reservation-style motels without a restaurant. Guests must rely on auto transport to get to other places on post, e.g., clubs, PX, etc. Income is generated from fees charged for the rooms only. These may be slightly higher than commercial rates because of the kitchenettes which require dollars for space and subsequent maintenance and operation.

| Planned guesthouses (FY87) | CWE (\$000) | <u>s.f.</u> |
|----------------------------|-------------|-------------|
| FT Bliss | 4,504 | 46,161 |
| FT McClellan (50-unit) | 2,533 | 25,645 |
| FT Ord-Ph II | 1,216 | 12,240 |

6.5.3 Golf Club Houses

Golf club houses support the golfing activities of personnel, their families, retirees, and guests. Often thought of as a senior elite

(officer and retiree) activity, this recreation is being given more attention in youth activities, and more emphasis is being placed on the participation of family members, as well as enlisted personnel. This, however, is usually in proportion to the amount of pro-training available.

Currently, there are nearly 100 courses in existence. Club courses vary in size (9 to 18 holes plus driving ranges and sometime miniature ranges); house facilities usually correspond to course size and membership. Therefore, the degree of service and physical amenities may vary from post to post. Most clubs are operated by professionals with offices in the club house. Generally, golf club houses contain a kitchen/snack bar, dining room with beverage bar and outside patios, pro-shops, showers and lockers.

Most operations have a separate cart storage building for 100 or so golf carts, and a separate maintenance building for equipment used to maintain the course.

Income is generated from fees charged members, range and green fees, cart rentals, food and beverage sales, pro-shop sales, and pro-clinics. The latter is usually lacking due to a shortage of qualified staff.

| Planned golf club houses (FY87) | CME (\$000) | S.F. |
|---------------------------------|-------------|--------|
| FT Knox | 2,547 | 20,897 |
| FT McClellan | 1,007 | 11,000 |
| FT Ord-Ph II | 528 | 7,250 |

6.5.4 3owling Centers

Bowling centers provide recreational activities primarily in the form of open and league bowling for all military personnel, their families and guests. Number of lares vary to 36; there can be a game room for billards, video machines, etc.; and there is usually a snack bar, pro-shop, lockers, and an office/control point for supervision of the lanes.

Income is generated from lane fees, shoe rental, pro-shop sales, food and beverage sales, video games, and advertising within the center (covers cost of scorecards, league charts, signs, etc.) This activity seems to appeal to the younger personnel, with potential for creating broader use and sales. Keeping up with state-of-the-art technology in bowling and scoring equipment is an important factor in realizing potential.

| Planned bowling centers (FY87) | CWE (\$000) | S.F. |
|--------------------------------|-------------|--------|
| FT Campbell (24 lanes) | 4,381 | 24,000 |
| FT Hood (12 lane add-on) | 2,958 | 14,000 |
| Presido Monterey (16 lanes) | 2,584 | 14,400 |

6.5.5 Package Beverage Stores

2

Supply distilled spirits through retail sales activities to all personnel and family members (of-age), and retirees. Size and convenience of sales and check-cut space, as well as location of the store are important factors to sales. Stores have offices, and main stores have warehouse space for servicing the clubs on post as well as the stores.

Income is generated from sale of a wide selection of wines, spirits, and beers along with mixers, snack items (some refrigerated), ice, gift decanters, and bar items. Currently, most stores generate a good profit, with potential for more. This money is used by MSA to support other activities that generate little or no income.

| Planned packaged bev stores (FY87) | CWE (\$000) | S.F. |
|------------------------------------|-------------|--------|
| FT Ord | 1,424 | 10,000 |
| FT Leavenworth | 1,473 | 5,900 |
| Presido San Francisco | 1,610 | 9,797 |

6.5.6 Skill Development Centers

Skill development centers include activities in arts and crafts and auto crafts. These include hobby and self-help activities as well as learning (skill development) activities. More emphasis is being placed on vocational training and the development of marketable sills, e.g. in the building, automotive, and electronics trades, and in home repair.

There is potential for income generation, although these facilities have not been thought of, nor operated as, income generating businesses. Current activities primarily include photography, ceramics, drawing and painting, woodworking and restoration, upholstery and sewing, computer workshops, and auto maintenance and repair, body work, and antique restoration. Facilities provided are usually fairly elaborate in equipment for both the activity function and the safety of participating personnel and staff. Generally there are connected but separate spaces for woodworking, ceramics, photography, and general crafts with a central office, resale shop, gallery, classroom, and lockers. The auto area contains sometimes as many as 36 bays with central tool storage and checkout, parts resale, classrooms, workrooms for engine rebuild or repair, paint booth, car wash facilities, and car storage areas.

Income is generated from resale of goods used in the different activities (wood, photo-supplies, paints, clays, framing materials, some selected auto parts, etc.), from gallery sales, and from fees charged for use of auto bays, car wash facilities, and car storage space. Sometimes additional income may be generated from classes or clinics, but these are not a substantial undertaking at this time.

| Planned skill dev ctrs (FY87) | CWE (\$000) | <u>S.F.</u> |
|-------------------------------|-------------|-------------|
| FT Hood (36 bay auto only) | 2,756 | 20,000 |
| FT Monroe (combination) | 1,408 | 10,000 |
| FT Campbell (16 bay autc) | 1,271 | 8,000 |

6.5.7 Youth Activity Centers

Support youth (5 to 19 years of age) activity programs which currently rely heavily on volunteers to supplement a small permanent staff. Included is a broad program of sports, and programs for before and after school camps, between school camps, etc. Dance, gymnastics and exercise classes are currently very popular as is karate, golf, soccer, baseball, football, and basketball including league competition. Music lessons and computer workshops also rate high.

Facilities may include a gym, class and exercise rooms, equipment storage space, a snack bar, game room, pro-shop, and TV/video tape viewing room. These facilities need to have access to outdoor sports fields or fields of their own. Also access to swimming facilities are desirable.

This type of facility may fit well into a multi-use Community Center concept with physical training facilities.

Income is generated from fees charged for classes and camps, and for sports. Also some income is generated from rental of uniforms and sports equipment, from the sale of concessions at sports events, and from special events such as carnivals. Income potential appears substantial with respect to creative program development, snack sales, fees charged for use of spaces for events, e.g., during the holidays, refreshment catering sales, etc.

| Planned youth centers (FY87) | CWE (\$000) | S.F. |
|------------------------------|-------------|--------|
| FT Meade | 2,703 | 23,300 |
| Aberdeen APG | 2,173 | 18,500 |
| Edgewood Arsenal | 1,322 | 11,340 |
| FT Gordon | 3,585 | 15,677 |

6.5.3 Recreation Centers

Support an adult audience. They are similiar in some functions to youth centers, usually with snack bars, activity rooms, game rooms, TV, etc. Popular offerings include jazzercise, computer classes, psychic workshops, video tape viewing, and tape rentals. These facilities often support students on temporally training assignments.

Income generation depends on program development to broaden the adult audience.

6.6 INTANGIBLE CONCERNS

The following concerns are based on findings and observations that surfaced during the various meetings with MWR staff at headquarters and on-post.

- 1. Facilities Not Conceived As Businesses, nor designed as money making activities. There are too many segmented activities (buildings) requiring staff to maintain service.
- 2. Location Is Critical, as important on military posts as is the location of money making activities in any community.
- 3. Enhance "Army Takes Care Of Its Own" Concept, counter any negative aspects of service by providing needed services to soldier and dependents that are accessible, affordable, available when needed, and commensurate with equilvalent services elsewhere.
- 4. Improve Knowledge Of Market Audience, users and interests in different activities that affect income vary from post to post. Some posts serve a high percentage of retirees and some civilians. Training post personnel have differing needs and schedules, etc.
- 5. Develop Market Potential On Knowledge Of What It Will Bear, some activities have more money making potential than others. All have the potential of generating more income, given the right location and creative marketing with fair and reasonable pricing.

- 6. Shortage Of Local Contracting Experience, to define and monitor contracts is of special concern at the post level.
 - Avoidance of contract escalation
 - Bottom line is low bid rather than quality
 - Layers of contract representatives
 - Distrust of contractor motives and dedication
- 7. Degree Of Local Command Control And Involvement, commanders traditionally expect activities to respond to the local command. This may involve directives de-emphasizing alcoholic beverage consumption and emphasizing family services, or it may involve use of facilities, most often club facilities, that might otherwise be generating income. Activities striving for self-sufficiency need freedom to cut costs and be profit-oriented while remaining sensitive to local command involvement.
- 3. DOD Criteria Versus Business Concept, space allowances for sizing based on strength does not necessarily coincide with financial operational viability. AR 415-19 suggests exceptions in facility programming for this, but there is feeling that DOD will not support deviations.
- 9. Obsolescence Due To Time Required To Deliver Facility, regulations tend to segregate and isolate facilities in planning. Once located on the master plan and entered in the rather lengthy approval, design, and construction process, facility plans are unlikely to change regardless of changes in the market audience and location.
- 10. Accountability And Government Trivia Versus Programs, time required to comply with dollar accounting procedures and to deal with administrative red-tape (inspections, visits, etc.) adversely affects time available to spend on programs.
- 11. Hidden Costs Of Military And Civilian Work Force, tendency of Government to inflate staff by using military personnel and appropriated and non-appropriated fund sources for civilians. These costs would diminish or surface under contract.
- 12. Money-Making Potential Affected By Lack Of Motivation, thinking is to keep the fees and prices as low as possible (almost at break-even). There is also an aversion to working for profits that might be siphoned off for other uses, and a real fear that excesses may be taken for use at other posts.
- 13. Need Business Oriented Incentive Program, "the more incentives managers have to increase income, the better the service usually is."

- 14. Difficulty In Competing With Contractors Is Demoralizing, currently difficult to show that Government (with 35% employee benefits) can do operations more efficiently, or less costly, than contractors.
- 15. Avoidance Of Short-Range Contracts, short-range contracts (year to 3-years) are disincentives to quality and efficient operations, and limit the depth and continuity of programs and services.
- 16. Keeping Up With New Technology And Trends, with respect to equipment, e.g., in bowling alleys, clubs, fitness centers, etc., and with respect to services. Regulations governing maintenance and replacement of equipment or modification of space are perceived to encumber this.
- 17. Multi-Use Flexibility Desired, some activities, especially clubs, turn away business due to lack of internal space or nearby space, and difficulty of getting approvals to expand. In keeping with this, a recommendation was received for combining youth and adult activities into one center which would promote family services as well as multi-use.
- 18. Hiring Practices Hinder Business Approach, many positions are filled with retired military personnel due to the low salary scales of most positions. This may provide understanding personnel in the work force, but it may also counter creative business objectives and income development, unless there is training.
- 19. Increase Professionalism, motivation, training, and attitude to deal with the military. There is need for skilled managers and professionals with creditable substance to promote creative trends in services, training, and other life enhancement activities.
- 20. What Is Private Sector Willing To Get Involved With, may well determine the type of facilities, or group of facilities, for private sector involvement. Projects may need to be aggregated either by type from post to post, or over several FYs to combine enough construction to interest investors, developers, and operators. (Common interest level is \$5 mil & up).
- 21. Corps Of Engineers Involvement In Turn-Key Construction, what will be the Corps' involvement versus some type of turn-key construction expeditor, perhaps coupled with an operations coordinator?
- 22. Advantages In Terms Of Time, time being \$ of open door money.

- 23. NAFI Tax-Exempt Status Versus Possible Taxation, private operators may be required to charge sales tax, a percentage increase that may or may not be off-set by contractor efficiencies and passed-along savings. NAFIs may become franchisees and maintain a tax-exempt status.
- 24. De-Glamorization Of Alcoholic Drinks Affects Club Profits, considered from both a moral and fitness point of view and a desire to orient clubs more to families. One source reported that about 50 percent of the military have families, and about 50 percent of the soldiers (male and female) do not drink alcoholic beverages. Given these figures, promotion of "glamorized" non-alcoholic drinks may tend to compensate somewhat for loss of profits in alcohol sales.
- 25. Treatment Of Under-Age Patrons, Re: alcohol use, has application to clubs, bowling alleys, etc. This is especially problematic now as age limits are generally increasing on a state-by-state basis.
- 26. Compatible Competition with AAFES, this is understood since AAFES pays a very large dividend to the MWR fund. Generally, the activities cannot sell things that AAFES sells. Pro-shops in golf clubs, bowling alleys, or skate rinks sell special items or items marked with special logos, etc., that fall outside of competing with AAFES. Likewise for snack-bars in such facilities, and for re-sale shops in arts and crafts and auto-craft shops.

6.7 ARMY INTANGIBLE FACTORS

From the concerns described in Section 6.6, the following factors were developed for strategy evaluation. Each strategy should be evaluated in relation to the project and in terms of its degree of responsiveness to these goal-oriented factors.

- 1. Promote Sense Of Place/Sense Of Belonging, a sense that the Army cares for its own in return for service dedication.
- 2. Develop Soldier And Family Appeal, perceived life enhancements and unique attractions provided by the Army.

and the property of agency of Southern Contract Section (Modern Section Sectio

3. Recognize Needs of Peer Group Audiences, without creating senior elite image.

- Enlisted, officers and retirees
- Child, youth and adult dependents
- 4. Recognize Needs of the Local Command, while maximizing operational business orientation.
- Promote Sense of Benefit, perceived return to the soldier and family.
- 6. Recognize Location of Market Audience, proximity of market audience to activity.
- Increase Timeliness of Product or Facility Delivery, to avoid obsolescence.
- 3. Deliver Good Products At Fair (AFFORDABLE) Prices.
- 9. Develop Motivation, Attitude, And Training Of Staff, to administer services and generate/expand income.
- 10. Promote Creative Trends And State-Of-The-Art, in both services, and building/equipment technology.
- 11. Simplify Contract Administration, practicality of contract standards and measures of performance for both construction of the facility, and operation of the activity.
- 12. Promote Depth And Quality Of Programs, versus low bid.
- 13. Maintain Quality From Post To Post, with the right things at the right time.
- 14. Promote Building Quality and Design.
- 15. Provide Flexibility To Deal With Unique And Changing Market Demands.
- 15. Recognize Private-Sector Interests, in terms of what the private sector is willing to get involved with, including new concept projects.
- 17. Capitalize On Existing Dedicated Work Force.
- 13. Recognize Mobilization Requirements, if any.

6.8 WEIGHTING OF THE FACTORS

Factors have been weighted as indicated in Table 6-1 primarily by USACFSC headquarters staff administering the activities in view of the relative importance of each factor to that activity.

TABLE 6-1
WEIGHTING OF INTANGIBLE FACTORS

| # Of Intangible Factor | Craft | Youth Activity | Bowl/Golf | Guesthouse | Clubs |
|------------------------|-------|----------------|-----------|------------|-------|
| 1 | 10 | 10 | 9 | 10 | 3 |
| 2 | 9 | 10 | 9 | 10 | 8 |
| 3 | 9 | 10 | 5 | N/A | 5 |
| 4 | 5 | 5 | 1 | 5 | 10 |
| วิ | 6 | 8 | 10 | 10 | 1 |
| ŝ | 6 | 10 | 1 | 10 | 10 |
| 7 | 6 | 7 | 10 | 10 | 1 |
| 3 | 5 | 9 | 10 | 10 | 1 |
| Э | 3 | , à | 9 | 8 | 2 |
| :0 | 10 | 10 | 8 | 8 | 3 |
| 11 | 9 | 10 | 7 | 9 | 4 |
| 12 | 9 | 10 | 8 | 2 | 3 |
| 13 | 10 | 10 | 7 | 8 | 4 |
| 14 | 9 | 9 | 7 | 10 | 4 |
| 15 | 9 | 10 | 7 | 5 | 4 |
| 16 | 9 | 9 | 9 | 1 | 2 |
| 17 | 8 | 10 | 1 | 10 | 10 |
| 18 | 10 | 9 | 1 | N/A | 10 |

10 Very important

1 Not important

7. PRIVATE SECTOR MARKET ANALYSIS

7.1 INTRODUCTION

This market analysis was intended to identify factors contributing to private sector interest in the financing, construction, and possible operation of MWR facilities. Specifically, the following objectives were defined:

- To determine the overall acceptability of the NAF financing strategies as defined in Working Note #1 by private sector investor/operators plus suggestions for other strategies, if any.
- 2. To define the types of investor/operators which are most likely to submit proposals for each strategy and for each building type under consideration.
- 3. To solicit input from potential investor/operators on particular contract terms and operating conditions which should be included (or not included) to make the strategies more acceptable.
- 4. To define minimum acceptable rates of return and minimum project sizes for individual buildings, groups of buildings at one location, and groups of buildings at different locations.

The state of the s

5. To determine the willingness of different types of firms to conduct a market analysis as part of a proposal effort to define the type and size of operation to be built and operated on post. A number of categories of potential private sector respondents to the strategies were defined, including construction contractors, syndicators, pension funds, investment bankers, and commercial property developers and operators (including franchisers and concession operators). Coldwell Banker Real Estate Consultation Services (CB) joined with Delta in conducting part of the interviews. Details of the interviews are described in the following sections.

7.2 STRUCTURE OF MEETINGS

Each meeting was started with a brief description of the U.S. Army Community & Family Support Center (USACESC), its source of funds, the type of MWR activities administered, and the estimated construction need over the next 5-years. It was noted that because of its non-appropriated funding, the USACESC is more business oriented and profit motivated by its desire to be self-sufficient. Thus, the reason for turning to the private sector is to help reduce the construction backlog, and to help realize needed services and revenues sooner.

The possible alternatives of (1) privately financed construction with Army (CFCS) operation, and (2) privately financed construction with private operation, were the principal strategies discussed.

In reference to the second alternative, the MWR activities administered by the USACFSC vary in degree of income produced. Thus, activities were described under the following categories:

| Profitable | Self-Sufficient | Potentially Self-Sufficient |
|-----------------|------------------|-----------------------------|
| Bowling Centers | Clubs | Auto Self-Help Centers |
| Pac Bev Stores | Guesthouses | Arts & Crafts Centers |
| | Golf Club Houses | Youth Centers |
| | | Recreation Centers |

With this base of information, ideas that might gain company interest were introduced by relating known company capabilities and resources to the Army's needs. Each company was asked about the terms and conditions needed to gain their interest, and for any comments that would aid in preparing a solicitation their company would respond to. The information gained from these discussions has been compiled into the series of factors described in the following section.

7.3 PRIVATE SECTOR INTEREST FACTORS

- 1. ARMY QUALITY ASSURANCE: Most companies recognize the potential value of exposing their name to a large audience of young consumers like those in the military. At the same time, there is risk, if the quality and reputation of the company's name is in jeopardy. Retention of franchises are based on compliance with quality standards. Attracting quality developers, franchisors, and concessionaires will depend in part on how well the Army can show its ability to uphold and enhance the company's reputation, realizing the competitive nature of the outside marketplace.
- 2. GUARANTEED RETURNS ON INVESTMENTS: Since any capital investment on Government land has no real or appreciated value to the private investor, most will expect a guaranteed rate of return between 8% and 15%, after taxes, adjusted to inflation. Additional return would be expected on the operation. The Army must be sure of the economic viability of an operation, or be prepared to use reserve funds to honor the guarantee.
- 3. UPSIDE POTENTIAL: Give investors a hope of realizing greater returns as in the private sector where there are incentives for expansion and spin-off businesses. This is most applicable to the structuring of concessionaire projects.

- 4. SOLVENCY OF GUARANTEES: The USACFSC must establish its credentials with regard to its authority to borrow and guarantee, and with regard to its credit rating and assets, to include any escrow on deposit.
- 5. BUY-OUT PROVISIONS: Most companies would expect to have some form of buy-out provision to cover any capital investment in the event the USACFSC, the Army, or Congress becomes dissatisfied with the company's involvement.
- 6. ASSURANCE AGAINST GOVERNMENT INTERVENTION: Some companies have experienced, and others fear that by having a Government contract, the Government will place itself in a position to pry into their business, such as or wage and employment issues. This extends to a belief that the Government may require a company to pay more costly wages or to comply with requirements mandated for Government work in the execution of their private ventures. Affirmative action programs and prevailing wage rate requirements which extend beyond the particular project in question are major concerns.
- 7. EFFICIENT PROJECT ADMINISTRATION: The Army's ability to control and support project implementation within the USACFSC must be clearly understood. The process of contract handling and project management should be defined and expertise procured to conduct business with authority and with sensitivity to the private sector environment. Most companies look for one point-of-contact who has decision-making authority to expedite approvals. This applies to both single and multi-unit projects, and any subsequent operations.
- 3. COMMITMENT TO TIME SCHEDULES AND DEADLINES: Most companies place great value on the relatively small amount of time it

takes them to complete a project, and to open doors for business. Adherence to schedules allows the company better control over financing, construction, and opening costs, and enables them to open and begin generating income as soon as possible.

- 9. AGGREGATION OF PROJECTS TO REACH FINANCABLE THRESHOLDS:
 Developer thresholds range from 5 to 10 to 20 million dollars
 per project. They would prefer to aggregate by installation
 or location and develop facilities for a variety of activities
 that are currently programmed piece-meal over a number of fiscal years. Where multi-unit construction involves a number of
 locations, at least 5 sites should be aggregated.
- 10. NEGOTIATED CONTRACTS OR LIMITED COMPETITIVE BIDDING: Most developers would prefer to negotiate the development of projects thereby covering front-end costs that are risked in competitive bidding. The issue is the quality of competition. Companies, and in particular quality developers, will have more interest in a limited competition where 3 or 4 bidders are selected by similar qualifications, e.g., ability to: (1) finance, (2) provide a turn-key facility, (3) offer property management services, and (4) demonstrate customer satisfaction from the standpoint of how well the bidder produced and stands behind the product. Construction contractors who are bidding for construction only will bid in open competition. Most other quality companies (e.g., developers, franchise operators, and lenders) will not be interested in bidding in open competition if they feel that price is the overriding evaluation factor.
- 11. DEFINITION OF BUILDING ECONOMICS AND QUALITY: The economics of most commercial facilities are based on a given life span

with periodic upgrades. For example, a 20-year life with upgrades every 5-years. This establishes a basis for building quality, that when tied with the quality represented by a model project or brand name, will give an indication of the level of performance expected. Developers in particular, suggested that for something like guesthouses or hotels, existing standards and specifications of a national or emerging chain be used to establish the level of acceptable performance. There is such a variance in the quality of interior items, as well as in the amenities that might be offered, that loose definitions may be very risky.

- 12. FACE-TO-FACE CONTRACTOR SELECTION: Experience in the orivate sector suggests that financial statements and other qualification statements may be very misleading. Selection may best be based on face to face interviews of personnel to perform the project work, and on contacts with previous customers to evaluate performance. This process might also be used in the beginning to select several competent companies in order to spread the risk and to gain comparative data on performance and cost.
- 13. RESOURCEFULNESS OF THE ARMY TO SELL ITS PROJECTS: Where brand name companies and quality developers are involved, the USACFSC must sell its projects by encouraging company interest, developing incentives, and, to a certain extent, by nurturing company egos. This may be best accomplished by limiting the number of companies under consideration.
- 14. PRIVATE SECTOR CONSULTING: USACFSC may be well advised by a professional consultant or volunteer group from the private sector. This advisory group would help in: (1) keeping the Army abreast of the market, (2) obtaining financing, (3) structuring contracts and leases, and (4) pre-qualifying developers and other potential offerors.

7.4 MARKET ANALYSIS ACTIVITIES - DELTA

Contacts were made with a variety of companies selected from the listing of owner-giants in <u>Building</u>, <u>Design</u>, and <u>Construction Magazine</u>, <u>December 1984 issue</u>. Three types of comapnies were contacted: franchisors, owner-operators, and developers. Contacts were basically limited to the Miami, Atlanta, Chicago, and Dallas areas based on the proximity of at least two or three promising interviews in each area. Meetings were held with 10 companies who had expressed initial interest and were willing to allow us to further elaborate upon the program, measure their responses, and collect facts about the company. These companies were:

| Franchisors | Owner-Operators | Developers | |
|---------------------|-------------------|------------------|--|
| Burger King | Servico | Tonn & Blank | |
| Arby's | Brunswick | Hawthorne Realty | |
| Days Inn | Sears | Cenvill | |
| Royce Hotels (1) | S&A Restaurant | Homart (2) | |
| (1) part of Servico | (2) part of Sears | | |

A meeting was also held with the Army, Air Force Exchange Service (AAFES) in Dallas regarding the program in general, as well as the recently awarded contract to Burger King for 185 franchise units.

7.4.1 Franchisors

BURGER KING (Pillsbury) Miami, Florida Tim Johnson (305) 596-7737 Director of Institutional Development

Company is a subsidiary of Pillsbury with units in all 50 states and in Germany. It has over 4000 units of which 15-20% are company-owned. Approximately 400 new units are being added each year. Aside from the company units, most of the new units go to established operators already holding Burger King franchises. Major franchisees under the Institutional Division include Greyhound; Woolworth; Howard Johnson; and the Army, Air Force Exchange Service (AAFES). The AAFES contract is for 185 units to be developed over the next 5 years, making AAFES the company's largest multiunit franchisee.

Since May 1984, 4 units have been placed in operation and 49 others are under development. To secure the AAFES contract, the company agreed to finance the construction of AAFES units on 10 year terms. So far, AAFES has not used this provision, choosing to use their funds first to see if the volume of sales in the initial units is high enough to generate funds for at least some of the subsequent units.

Because the units are located on military installations which are subject to the Davis-Bacon Wage Act, the company opted out of construction. This was based on legal advice that the company might be required to honor the costly provisions of the Act on their non-Government projects. (Further discussion regarding Davis-Bacon is contained in the AAFES meeting summary.)

The company is providing a market/site analysis, design, specifications, and site visits during construction. AAFES is niring the contractor and overseeing construction.

The company is providing management training, and distributor sources for uniforms, food and beverage supplies, etc. AAFES will employ the personnel and operate each unit, which requires an average of about 70 people and 5 managers.

The company provides 2 approved suppliers in every market, of which one is their own distributor. The company bid to supply AAFES and won, stating that "AAFES would have difficulty buying for less." Also, AAFES is being given recipes and specs for baking sandwich breads and for making and quick-freezing its own hamburger to supply its Burger King European outlets. (AAFES plants now make ice cream in Europe for its Baskin Robbins outlets.)

Quality assurance will be a function of both the company, who will make site visits during operation, and AAFES. The company regards the AAFES organization as very professional and capable of handling its largest multi-unit franchise well.

Summary of fees and other data:

| | Private | AAFES | |
|---------------|-----------|-----------|--|
| Royalty | 3.5% | 4% | of gross sales |
| Ad Fee | 2% | 2% | local |
| | 2% | 0% | national |
| Franchise | \$40,000 | \$15,000 | per location plus
reimbursement of
site visits |
| Term | 20 years | 5 years | w/3 renewal options |
| Average Gross | \$1.5 mil | \$1.8 mil | expected |

Tim Johnson is the one point of contact for the AAFES franchise. In the States, all company regions work through him. He indicated that both Burger King and Pillsbury were pleased with the AAFES contract, and

that everything is running smoothly. The company feels that the coming of Burger King to military installations has helped to make other operations, the dining halls, clubs, and snack bars more efficient and market conscious.

Some existing franchises outside installations were bought up by the company, other franchisees have company assurance that it will take care of them, arguing for the time being that the additional 2% local advertising fee that the AAFES units will pay will help equalize business.

It should be noted that the company does operate several concessions for the Navy, such as at Long Beach where they bid for a cafeteria in the Exchange offering to pay Navy Resale a straight 15% of sales with no minimums, for a 10 year deal on the space, which they remodeled. The company may, in fact, prefer concessions because of the income potential, however, their concession customers are paying sales tax.

ARBY'S, Atlanta (Royal Crown) Atlanta, Georgia Russ Johnson (404) 262-2729 Vice President, Franchising

Company is a subsidiary of Royal Crown with units in all 50 states. It has a total of 1400 units and is adding about 200 new units in 1985. The company believes there is still a lot of expansion potential in the private sector, and is looking for new franchisees. Arby's relies on small businessmen to run single units, however its largest franchisee (RTM Corp) runs 140 units, and the company itself owns and operates 180 units.

The company submitted a copy of their Franchise Offering Circular that provides information to prospective franchisees as required by the Federal Trade Commission. (Included as part of the miscellaneous material submitted to the contracting officer.)

While the company's main interest is in private sector development, it would certainly entertain the prospect of franchising an Army operator on military installations if that operator is willing to submit to the same standards as the private sector.

The company does grant exclusive trading areas, usually a 1 mile protective radius, that could affect location of new Army operated units on some posts.

The company provides a full range of support: market analysis, site approval, design and construction, financing, training, advertising, quality assurance, and purchasing. For financing, it uses the Franchise Finance Corporation of America, which is underwritten by E. F. Hutton. FFCA works with 8 different chains including Hardees, Burger King, Kantucky Fried Chicken, and Taco Bell. Average minimum franchisee investment on an Arby's unit is \$100,000 with the remainder financed. Total cost of a unit is \$650-800,000 for a 30,000 s.f. site and a 2400-3400 s.f. building.

Summary of fees:

| Royalty | 3.5% | of gross sales |
|-----------|----------|------------------------------|
| Ad Fee | 3.0% | local |
| | 1.2% | national, subject to 2% max. |
| Franchise | \$32,500 | first unit |
| | \$20,000 | subsequent units |
| Term | 20 yrs | |

DAYS INN (Reliable Realty) Atlanta, Georgia

Theo Etzel (404) 325-4000 Real Estate Manager

Company ownership has recently transferred to Reliable Realty (Saul Steinberg). The company is now shifting to a more aggressive franchising program. It wants to divest its real estate, but hold onto the franchises. The company has 324 properties with 45,500 rooms in 31 states. 30% of their occupancy is attributed to their central reservation system.

Initial construction is normally a minimum of 100 rooms on 2 acres of land. They consider 120-160 rooms as most efficient for staffing. The company programs actual construction time at 6-9 months. Average room cost is \$32-34,000\$ with land.

Summary of fees:

| Franchise | \$15,000 | first 100 rooms |
|--------------|-----------|--------------------------------|
| | 100 | each additional room |
| | 5,000 | restaurant |
| Royalties | 5% | gross lodging |
| | 3% | rest., gas, gift & misc. gross |
| Ad & Mktg. | 1.5% | gross lodging |
| Reservations | \$2.80 | per room per month |
| | plus 1.40 | per reservation per month |
| | plus .08% | gross lodging per month |
| Training | .15% | gross lodging per month |
| Escrow | \$300-400 | per room per year based on 5 |
| | | year furniture replacement. |

Franchise cwners must submit to ongoing training for their field management and, in addition to their reservations and marketing support,

Days Inn provides national purchasing contracts, quarterly quality assurance inspections, and regular consulting. Company's interest in its reputation drives its interest in maintaining quality.

Days Inn is very interested in possible opportunities on military installations and would be willing to work out financing, as well as turn-key design and construction. However, they noted that if companies are placed in a bidding posture, the Army should clearly establish standards for room quality.

Days Inn would also be interested in management contract at 5% of gross lodging, plus \$360/room/year (for accounting functions) and 50% (varies) of the profit.

ROYCE HOTELS (Servico) West Palm Beach, Florida John Metz (305) 686-4699 Sr. VP, Development, Servico Steve Selka CEO, Royce Hotels

The Royce Hotel chain is being developed by Servico who owns a number of Holiday Inn and Hilton franchises. While most of their existing Royce units are airport mixed-use developments, the company is introducing the Royce Inn with 2 standard designs: a 2 story, 135 room courtyard design and a 5 story 185 room linear design. Both designs have medium restaurant meeting room support and 25% suites.

The Royce Inn designs are efficiently sized, appealing in appearance, and represent a quality level that corresponds to new Army guesthouse designs. The company is also very interested in expanding the Royce name and may be able to offer the Army more flexibility and innovation in services than some of the older line names.

Service has 95 properties with 12,000 rooms. They centrally manage all their properties from their Corporate headquarters adjacent to the Royce Hotel in West Palm Beach. This includes the processing of receipts and disbursements, financial management, architectural and interior design, and Royce reservations.

They program 18 months from site investigation to occupancy. Room costs vary from \$32-50,000 per room without land. They program a 5 year room life, and spend about \$1000/room/year for maintenance and 3% of gross/year in replacement reserves.

The company is aggressive and has good financing sources. It would be interested in developing an arrangement where Servico/Royce would set up a separate division for distinct attention to the military units, providing verification of market/site analyses, financing, design-build construction, training, advertising, reservation system, etc. While franchising is a distinct possibility, fees were not discussed.

The company did indicate interest in management contracts involving a management fee of 4% of the gross sales, and an incentive fee of 10% of the gross operating profit. This might fit into a scenario where the company provides the financing and turn-key construction, and the operation for the first few years before turning it over to the Army.

Company is also interested in Club development and the adaptive reuse of Clubs.

They are concerned about bidding standards should the Army select open procurement. They can build to any room cost, but the Army must establish standards of construction: quality of interiors; maintenance impact; room sizes; sound levels; types of furniture and bath equipment; drape, wall, and carpet quality; and terms of the reservation system.

7.4.2 Owner Operators

BRUNSWICK RECREATION CENTERS (Brunswick)
Skokie, Illinois

D

Lou Esner (312) 470-4219
Dir., New Business Development
Kal Sinton (312) 470-4177
Dir., R.E. Dev. & Property Admin.
Jerry Lundgren (616) 725-3200
Sales Admin. Manager
Brunswick Equipment Division

AREST CONTRACTOR STREET, BOSTON BANK

One of several Brunswick companies, Brunswick Recreation Centers, operates 120 units in the U.S. and 12 in Germany, all oriented towards family recreation. It is organized into 3 regions and 17 districts with 10-12 centers each--with manager/assistant manager responsible for bowling, liquor, snack bar, pro-shop, maintenance, and promotion. Company owns 40-50 properties, remainder are leased. All are operated as company businesses. Company has possible interest in bolstering its units in Germany with additional units.

Company is set up to provide turn-key facilities using a standard 40 lane, 36,000 s.f. design, which needs a population base of 40-50,000. They use one general contractor, David Timberlake (405) 840-2521 in Gklahoma City, and one architect, Phil Fitzgerald (405) 765-0678 in Ponca City, Ok. to design and build their centers. They build and install their own equipment.

Company would have to develop financing sources, expressing concern about using Corporate funds to finance construction on military posts. They would offer management services to set-up, operate, and assure quality of a center, which could be done separately, or as part of a package.

Corporate criteria is 15% rate of return on assets. A 40 lane center must gross \$1,400,000/year to achieve a 15% return, based on 10-14,000 games/lane/year at \$1.50 each.

They use a learn-to-bowl program and other promotions to bring in new bowlers, but generally have 80% of their business locked up in league contracts with revenue assured usually a year in advance.

Company considers cleanliness and operation paramount to bowler's value of the center. They use an extensive 12 page service analysis form to evaluate center performance, covering appearance, mechanical and safety items. (A copy of this form is included in the miscellaneous material submitted to the contracting officer with this report.)

Brunswick's Bowling Equipment Division manufactures and installs equipment that is also on GSA schedule. Other companies within Brunswick manufacture marine and fishing equipment and some have defense contracts.

The only national-international competitor recognized by Brunswick Recreation Centers, is AMF.

SEARS Chicago, Illinois Bob Weiseneck (312) 875-9481 Dir, Corporate Planning Jim Gattis Contract Sales Gary Salton (312) 875-5362 Homart Development

The Sears organization was mainly interested with respect to in contract furniture and equipment sales. They have done interior design and furniture installation in Air Force facilities. They were also interested in possible development work through their Homart Division of Coldwell Banker, however, this would have to involve projects of \$20 million and up.

From past experience, Sears has concern about the Government positioning itself to pry into their business. Presently, the Chairman's policy is for Sears to not do business with the Government--a policy that

would have to be addressed if they wanted to become involved with an Army project.

The principal objective of Sears is to promote retail, catalog, and contract sales and services such as provided by Dean Witter 'financial brokerage', Allstate (insurance), and Coldwell Banker (real estate).

Some of the relationships discussed included automotive self-help and Sear's automotive centers, as well as the sale of auto and skill development items, like Craftsman saws, sewing machines, tools, etc.

There was interest expressed about possible Sears Catalog Stores on military installations.

S&A RESTAURANT CORP.

(Dillsbury)

11las, Texas

Al Anz (214) 960-5161 V.P. of Real Estate

Company is a subsidiary of Pillsbury and will operate over 350 Steak & Ale's, Bennigan's, and J.J. Muggs in 33 states with sales over 500 million in 1985. The company conducts its own market analysis, designs and builds most of its units, and operates each with its own people maintaining high control over menu quality. They have training oriented towards their specific operations, a test kitchen, interior design capabilities, and a central financial management and sales analysis system supported by computer input from their units on a nightly basis.

S&A units are 6-7,000 s.f., and gross about \$1.5 million. Bennigan's and Muggs go to 10,000 s.f. with dance floor, and gross about \$2.4-3.0 million. They look for about 50,000 people in a 3 mile radius to get these figures. Units cost around \$2 million and take 6 months to construct, plus 90-365 days permitting time.

They prefer to first own their projects. If they lease, it's normally for 20 years. S&A books are set up so that their capital investment is returned over a 20 year life, with renewal of building and equipment every 5 years. Thus, in the Army's case, the building would be turned over to the Army at the end of 20 years at no cost. Return on invested capital is 23-24%; internal rate of return is 17-18% over 20 years. They use a straight-line 20 year depreciation.

S&A feels that they are driven by competition and that they know the market—that private sector names who must maintain reputations will bring "state of the market" and quality to the Army.

S&A would be interested if the Army can show or assure economic viability for an operation like Bennigan's—such as, in relation to clubs. (Quality note: Bennigan's uses free-pour in their bars to keep customer satisfaction high, as well as show the skill of their bartenders).

Recommendations offered:

- 1. Build building and operate on a 20 year basis with a percentageof-sales fee in lieu of ground rent.
- 2. Have buyout provision if the Army wants operation out.
- 3. Set aside funds for renewals of building and equipment every 5 years.
- 4. Assure cash return on cash invested, given inflation.
- 5. Maintain central control over multi-unit operations and quality assurance.

7.4.3 Developers

TONN & BLANK Michigan City, Indiana Dick Blank (219) 879-7321 President Bill Mueller, V.P. Morey Much (312) 346-3100 Attorney

Company is an aggressive contractor, engineer, and developer. They offer design-build services and are licensed in 34 states. Company is currently constructing a number of Wal-Mart stores.

75-85% of their work is negotiated contract. Company owns properties and has experience in financing projects and in managing properties, which is generally done under separate maintenance contracts.

Company has worked with the Government and is interested in new opportunities such as third party contracting. They would prefer a project threshold of \$5 million, and would like to see projects aggregated by installation since it's cheaper to set-up once in one location. If multi-unit construction at different locations is involved, they would like to see at lease 5 units of one type aggregated into one project.

Company is willing to compete in design-build work as they feel it costs less to develop their own design than to review someone else's designs and bid on conventional construction projects. It is important to have in-house interaction among designers, contractors, and property managers to get projects within reasonable limits of quality and costs. This is what Tonn & Banks offers and feels should be criteria for qualifying 3rd party contractors.

Company would prefer to compete only against bidders with similar qualifications, i.e. ability to provide financing and in-house turn-key

construction, along with customer recommendations. Tonn & Blank promotes its satisfied customer lists and feels strongly that such should be an important qualification factor.

Time is money, both for the Army and the contractor. Company design-builds 180,000 s.f. WalMart stores in 7-8 months and finds few, if any, of the USACFSC's facilities taking over 12 months to build. A lot will depend on how experienced the Army's project managers and contract handlers are. Company feels it would be time consuming to be reviewed by the Corps of Engineers, and that CSFC might want to consider hiring outside consultants to help expedite review and approvals.

Company feels key to financing success is the guarantee of the lease. They see a minimum of 13% return on investment adjusted to inflation.

Company would probably be interested in developing guesthouses on military installations by putting together a name lodging operation with financing and construction. It was suggested that USACFSC might use Holiday Inn's, or on other known name's specs, to establish quality standards.

HAWTHORNE REALTY GROUP Oak Brook, Illinois

Bob Finke (312) 266-8100 Vice President

Company is a full service development company that provides financing, construction, and management services. The company specializes in creative financing and syndication techniques for the private sector. They currently have 160 ventures and \$1 billion in projects. Most of their projects are developed, then sold with retention of contracts for property management. They develop custom residential projects as well as office complexes with restaurants, hotels, health clubs, and indoor-

outdoor recreation facilities. Hawthorne is currently working with Canteen Corporation on a "better service" luncheonette in several of their complexes. These are called Guliver's.

They are also one of the largest developers of industrial property, and did a large turn-key project for General Motors in the '70s.

Their projects follow placement of money. The current fad is in suburban offices which they expect to continue for another year. Hawthorne recently purchased 7 franchises located in Florida for a new courtyard concept (yet to be named by Holiday Inn) and are moving more into hotel development.

Hawthorne has 2 general contractors for work below \$50 million. They use a few select outside architects, but do provide design manuals for offices and hotels covering energy, housekeeping, architectural/ir rior details, landscaping, etc. Their property management group uses a maintenance spec book to structure their management work.

Hawthorne indicated limited interest in Government work. As a rule, they avoid GSA because GSA work consumes too much time and generally involves standards that don't fit into their private work. They might take interest in USACFSC projects if they knew they were competing with developers with similar standards of quality and capabilities.

As a general rule, their project threshold is \$10 million and they prefer \$20-25 million.

They believe the most important thing in tructuring a lease is to ensure a hedge against inflation. Bids, if solicited, should allow leases to be adjusted; 25-35% of CPI is current market. Investors generally look for cash-on-cash rate of return of 15-20%--and they are always interested in the up-side potential of an investment, the possibility of expansion, or spin-off of new businesses.

Recommendations offered:

- Be specific regarding what's wanted in construction. Focus
 main attention on quality and amenities. Reference existing
 facilities as minimum standards with photos and specs of
 buildings, site improvements, furniture, handicapped provisions, etc.
- 2. Army organization very important in dealing with developers. Key is one contact for each project with authority to make approvals and decisions to maintain schedule, without having to go to higher authority. Groom project managers to handle different regions of the country.
- 3. Hold developers responsible for performance of product. Establish clear obligation on part of developer to stand behind his product. Don't check every little detail.
- 4. Better to go with one installation with \$10-20 million in development than to spread across several installations.
- 5. Conduct in-depth interviews with developer personnel to perform work and with customers who have had time to live with his product. Financial statements and other qualification statements are often misleading.
- 5. Approach new developers with "more work" potential so they don't become short-sighted on performance. Spread the risk by dealing with several competent developers.
- 7. Consider obtaining advice from a group of development-oriented practitioners in the private sector who might be assembled to advise on how to best obtain financing, structure contracts and leases, and pre-qualify bidders.

AAFES Ron Wulff (214) 780-3351 (Army, Air Force Exchange Service) Director of Services Dallas, Texas

AAFES has 16,000 retail, food, motion picture, automotive, and personal service outlets on Army and Air Force installations world-wide. They employ 60,000 civilians and serve 7.2 million active duty personnel, their families, retirees, reservists and National Guardsmen on duty, and authorized civilians. The average AAFES customer is 24.6 years old, earns \$15,000 per year, shops at the exchange once a week, and lives within five miles. AAFES has over \$4.6 billion in annual sales, and returns of \$450-700 per s.f. which are among the highest in the industry. Half of their net profit of \$240 million is retained for new building, and the remaining half is split-up between the Army and the Air Force for MWR purposes.

AAFES' is regulated by ceilings on items such as jewelry, home appliances, building materials, etc., thus, leaving big-ticket items to private sector stores. AAFES and USACFSC work together to ensure mutual agreement on items to be sold by each, primarily so that USACFSC is not competing directly with the items and services offered by AAFES.

AAFES does in-house design on smaller projects. They select their own architect and contractor on larger projects, and the Corps of Engineers administer construction.

opens en en en en sassence de digas, la sancada das la displacas ser sona anomala de de deserva

AAFES is the only part of DOD that hires and fires its own employees. Wages paid employees are based on Department of Labor surveys of prevailing (union) wages in the surrounding community as required by the Davis-Bacon Wage Act. This amounts to 15-20% over minimum wage and applies to anyone who operates on military installations. They must also deal with EEO laws that require them to hire a certain percentage of minorities and to train minorities.

AAFES has done little contracting to date, but plans to expand through franchising e.g., Burger King, because concessionaires must pay sales, use, and income taxes. AAFES-operated franchises avoid these taxes, plus it gives AAFES an opportunity to use existing employees and provide positions for upward mobility. Also, concessions are more likely to be subject to the Randolp-Sheppard Act, which requires that the local state blind agency be given an opportunity to participate.

AAFES believes that brand names help with sales as well as establish a degree of known quality. The Burger King contract was based on criteria that the franchisor operate in all 50 states. This limited competition to three companies, Burger King, McDonalds, and Wendys. AAFES did a lot of missionary work on these three as <u>none</u> were initially interested in making an offer in a competitive solicitation. AAFES was unable to interest Wendys, partly because Wendys was limited by exclusive franchises. McDonalds wanted only to deal with concessions and finally withdrew. Burger King successfully worked out a franchise contract for 185 units after buying out some exclusive franchises around San Antonio, Texas in order to franchise new AAFES units in that location.

It is taking AAFES 7 months to build a free-standing Burger King. The company designs and provides working drawings; AAFES solicits and contracts construction or renovation under the rules that exist, including Davis-Bacon and EEO. This makes AAFES Burger King units about 20-30% more expensive than those constructed by the company for the private sector.

AAFES has a triple-A rating for investors with billions in assets in inventory and capital reserve funds. Also AAFES is a financial entity with authority to borrow. These facts form the base of the Burger King mortgage program.

AAFES believes that USACFSC could establish credit with their \$300-400 million in bank deposit assets and with authority to borrow approved by Congress.

If USACFSC expects buildings to be turned over to the Army at the end of 20-years, then there must be some form of contract guarantee with solvency, such as an escrow on deposit, and there should be a buy-out provision in case the Army becomes unhappy with the private sector involvement.

With respect to the Army's concept of self-sufficiency for each installation, it was noted that 3rd party contracting will allow the building of a number of facilities very quickly to help provide better services and generate more income sooner.

7.5. MARKET ANALYSIS ACTIVITIES - COLDWELL BANKER

Contacts were made with six types of companies: building construction contractors, syndicators, pension funds, pension fund managers, investment bankers, and commercial owner operators. Telephone interviews were conducted first, followed by face-to-face meetings with some companies, as appropriate. Summaries of these interviews, grouped by type of company, are presented in the following sections.

7.5.1 Building Construction Contractors

Twenty contractors were selected from the 1984 <u>Engineering News</u>

<u>Record</u> (ENR) list of the top 500 U.S. contractors. A series of question were prepared and telephone interviews were conducted. The responses are summarized as follows:

- o most have contracted with the Government;
- o most have built similar projects;
- most would bid on NAF-MC projects using some financing strategies as described;
- o about half of the companies have minimum project size thresholds which could impact response to NAF-MC projects;
- o most of the larger companies have bid on overseas projects in the past and most of these would bid on projects in Germany.

The specific questions asked and responses given by each company are shown in Exhibit 7-1. Detailed responses are presented for each company as follows:

Exhibit 7-1

COLDWELL BANKER CONSULTATION SERVICES MATRIX SUMMARY OF INTERVIEWS WITH BUILDERS

| • | | | QUESTION NO. | | | | |
|--|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------------|--------------------------------------|---------------------------------|
| NAME OF COMPANIES | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| TOP GROUP | | | | -,-, | | | |
| Bechtel Group, Inc. Kellogg Rust The Parsons Corp. Raymond International Sterns-Catalytic World Brown & Root MIDDLE GROUP | Y
Y
Y
Y
Y | Y
Y
Y
N
Y | ?
Y
Y
Y | Y
Y
Y
Y | Y
Y
N
N
Y | Y
Y
Y
Y | ?
Y
Y
Y
Y |
| Forest City Dillon, Inc. Chanen Construction Co. The Atlas Construction Co. The Starstone Construction Co. The Joseph L. Muscarelle Co. The Henderson Co. Ti-Bert Systems B. B. Anderson Construction Co. Martin K. Eby Co. J. M. Foster, Inc. | Y
Y
Y
N
N
Y
Y | Y
Y
Y
Y
Y
Y
Y | ?
Y
N
N
Y
Y
Y | Y
Y
Y
Y
Y
Y
Y | N
N
Y
N
Y
N
Y
Y | Y
N
N
N
Y
N
N
Y | ?
?
N
N
N
Y
Y |
| BOTTOM GROUP Flint Co. R. B. Potashnick & Associates Kloster Co. Edward Gray Corp. | Y
Y
N | Y
N
Y
Y | Y
Y
Y | Y
Y
Y | Y
N
Y | N
Y
N | N
Y
N
? |

QUESTIONS ASKED ON THE SURVEY

- 1. Has your company ever contracted with agencies of the Federal Government?
- 2. Has your company built any of the types of projects that I mentioned?
- 3. Would your company bid on a project like this for the government in the future?
- 4. Would they bid on a package of similar types of construction projects located on more than one base?
- 5. Do you have minimum and maximum volume thresholds for your projects? (\$)
- 6. Has your company ever bid on jobs located outside the U.S.?
- 7. Would your company consider bidding on projects located in Germany?

Top Ten Group

- BECHTEL GROUP, INC. San Francisco (415) 768-1234
 - Don't want to get involved in small projects (ones less than \$20 million).
 - Find the Federal Government very complicated to work with overall (bids, contracts, etc.).
 - Thinks local companies are better and more competitive for smaller projects (economy of scale).
 - Might be interested in a regional package arrangement (if over \$20 million and the return meets their expectations).
 - If the orajects were standardized (same plans for similar buildings at various locations), the bid would be more competitive.
- 2. KELLOGG RUST Houston (713) 960-4000
 - Worked with Federal Government overseas, but not much in the United States.
 - Signal Corporation is the parent company and has certain guidelines for rates of return in an equity arrangement.
 - Minimum threshold will depend on location and competition in that location.
 - 15 to 20 percent is the normal rate of return for risky projects, however, they would accept less than this if the Federal Government guaranteed a return.
 - Very interested; would like to talk about owning and operating.
 - Contact J. C. Richards, Y. P. of Government and International Affairs (202) 466-6810.

- THE PARSONS CORPORATION Pasadena (318) 440-2000
 - Have built housing and recreation facilities for the Government in the past.
 - Have a maintenance and operations department.
 - No minimum threshold or maximum.
 - Currently have a contract with the Federal Government.
 - Have worked all over the U.S. and extensive work in Europe.
 - Have equity interest in several projects and have sources of financing available for other projects.
- 4. RAYMOND INTERNATIONAL Houston (713) 623-1500
 - Specialize in marine highway and bridge work don't do commercial work.
 - No interest in this project.
- 5. STERNS-CATALYTIC WORLD Denver (303) 758-1122
 - Have worked with the Federal Government (Department of Defense, Energy, and Interior).
 - Interested in a package bid.
 - \$1 million minimum threshold, no maximum.
 - Recently merged with Air Products Company--have worked all over the world.
 - Interested in this project on a worldwide basis.
 - Interested in owning and operating.
 - Contact Frank Gibbons (202) 775-8250.

- 5. BROWN AND ROOT DEVELOPMENT Houston (713) 676-4141
 - Lots of overseas work 28 different countries.
 - Four major regional offices prefer work in midwest, south and west coast. Don't like northeast because of New York competition (prefer to work in area where they have offices, but would consider other areas if the return meets their expectations).
 - No minimum or maximum threshold.
 - Have contracted with several federal agencies (Department of Defense, Navy, Army, and Coast Guard).
 - Very flexible in ownership position. Will set up joint ventures and other types of financing.
 - They respond to Government ads in the <u>Commerce Business</u>
 <u>Daily</u>.

Middle Group

- 1. FOREST CITY DILLON, INC. Ohio (216) 257-1200
 - Have built some barracks for the Army in the past.
 - Their expertise is in "repetition" projects--such as highrise. They manufacture units in one place and ship them to a building site ("repetition" parts would be like an entire bathroom).
 - Would be interested in a package project if "repetition" units could be used.
 - No minimum or maximum threshold, but would be much more competitive on a larger project, \$5 million or more.
 - Work all over U.S. have worked in Iran before.
 - They build a lot of hotel-motel and elderly housing where they can apply the repetition parts--a system builder.

- 2. CHANEN CONSTRUCTION COMPANY Phoenix (602) 266-3600
 - Has worked with the Faderal Government in the past (in Florida, California and Arizona).
 - Contracts with Ramada Inn Motels nationwide.
 - Lots of commercial business, hotels, strip centers, etc.
 - Would be interested in a package project nationwide if the return met their expectations.
 - No minimum or maximum thresholds.
 - Have only worked in the U.S. might be interested in overseas if the return met their expectations.
- 3. THE ATLAS CONSTRUCTION COMPANY Connecticut (203) 327-0330
 - Have worked with the Federal Government in the past, but mainly on a state level.
 - Works only in the U.S. concentrates in Westchester County, NY.
 - Mainly office building construction.
 - Minimum threshold is \$3 million and would depend on location.
 - Might be interested in owning and operating will take an equity position.
 - Not sure if they would bid on projects outside the U.S.
 - Have sources of financing.
- 4. THE STARSTONE CONSTRUCTION COMPANY Houston (713) 556-0695
 - Affiliate of the Dick Company.
 - Has worked with the Federal Government in the past (U.S. Post office, Corps of Engineers).

- Only interested in building no ownership position.
- Non-union only work in non-union areas.
- Would be interested in a package project if IRR is guaranteed.
- Minimum threshold is \$10 million, no maximum bonded to \$150 million.
- Extensive work with the Government, very used to their regulations.
- Mainly worked in Sunbelt areas, would bid in other areas if return was high enough. Would not bid overseas.
- THE JOSEPH L. MUSCARELLE COMPANY New Jersey (501) 845-8100
 - · Have worked with the Federal Government in the past.
 - Do not like working with the Government would not be interested in this project.
 - Minimum threshold is \$10 million.
 - a Only like to work in New Jersey, New York, and Florida.
 - Don't like to own or operate only interested in building.
 - Did one project for the Corps of Engineers a long time ago got 'screwed' and won't work with the Government any more.
- THE HENDERSON COMPANY New Jersey (201) 685-1300
 - Have not contracted with the Federal Government in the past but have worked for state schools.

n and servence of 1980 and control and the control of the control of the theory of the control of the control

- Only interested in building.
- Mainly work in Atlantic City.
- Would go out of state, if big enough project (\$15 \$25 million).

- Presently building a "Live-for-Life" recreation club for Johnson and Johnson.
- Minimum threshold depends on location, amount of travel, etc.
- Would not be interested in bidding on projects overseas.

7. TI-BERT SYSTEMS - Ohio (216) 753-4531

- Have not contracted with the Federal Government but have worked for state and local Governments.
- Would bid on a package project, if rate of return met their expectations.
- Only worked on Ohio but are qualified in other states.
- Only interested in building, no ownership.
- No minimum threshold.
- Not sure if they would bid on projects overseas.

8. B. ANDERSON CONSTRUCTION COMPANY - Topeka (931) 233-2381

- Has worked with Federal Government in the past (Veterans Administration) lots of state work for universities.
- Very interested in building, not sure about owning and operating.
- Minimum threshold depends on location over \$5 million.
- Would like to put together a package bid, if rate of return met their expectations.
- Mainly work in midwest, south and west coast would consider other locations if rate of return met their expectations.
- Have worked in other foreign countries and would be interested in projects in Germany.

- 9. MARTIN K. EBY COMPANY Wichita (315) 268-3500
 - Has worked with Federal Government in the past (Corps of Engineer).
 - Only interested in building.
 - Minimum threshold depends on location \$5 million minimum.
 - Have mainly worked in midwest locations would only bid on package projects if rate of return met their expectations.
 - Don't want to get involved with financing.
- 10. J. M. FOSTER, INC. Gary, Indiana (219) 949-4020
 - 99 percent is industrial work, no commercial work would not be interested in this project.

Bottom Group

- 1. FLINT COMPANY Tulsa
 - Has worked with Federal Government in the past.
 - Building only; might take an equity position, if rate of return met their expectations.
 - Has a sister company (non-union) that would also be interested.
 - If numbers work, they are interested in anything.
 - Minimum threshold \$1 million.
 - Mainly worked in the midwest other bids will depend on location and rate of return.

(4) 報告のようなできる。(4) 数字のようなないます。(5) 数字のようなないます。(6) 数字のようなないます。(7) 数字のようなないます。(8) 数字のよりないます。(8) 数字のようなないます。(8) 数字のようなないます。<l

Not interested in overseas work.

- 2. THE R. B. POTASHNICK AND ASSOCIATES Cape Girardeay, Missouri (314) 334-3081
 - Extensive work and grading in pipelines, very little commercial work.
 - Worldwide company.
 - Corps of Engineer highway work for the Federal Government.
 - Minimum threshold \$10 million.
 - Would be interested bidding on the grade work, but nothing else (U.S. and abroad).
- 3. KLOSTER COMPANY, INC. St. Louis (314) 394-3888
 - Worked for the Federal Government in the past.
 - Minimum threshold \$3 million.
 - Mainly works in Missouri.
 - General contractor.
 - Will go out of state if numbers work.
 - Not interested in overseas work.
 - Mild interest in bidding.
- 4. EDWARD GRAY CORPORATION Chicago (312) 221-8400
 - Have not worked with Government before, but are interested.
 - Subsidiary of Inland Corporation who would be interested also in taking an equity position.
 - Experience in building these types of projects.
 - No minimum threshold.

- Have only worked in the U.S. not sure about bidding overseas.
- Would be interested in bidding on a package project.

7.5.2 Syndicators

JMB - Chicago (telephone) Joanne Leary (312) 440-4800

JMB's typical approach is to acquire, hold (and depreciate) and then sell income-producing properties. In its experience, there is typically little marketability of Government-tenanted property (referring to conventional office buildings in conventional types of locations). There surely is even less marketability for buildings located on military bases. This is not a line of business that JMB would consider.

BALCOR - Skokie (telephone) Tony Raimundi (312) 982-0550

This is not the type of product that Balcor would acquire for pension funds. Balcor works with companies on a first mortgage basis. It turns away 90 percent of opportunities to finance (in terms of volume) and would most likely turn away this opportunity. It has no reason to finance unconventional projects or enter into unconventional deals.

INTEGRATED RESOURCES - New York (meeting) John Aired (212) 551-6200

John indicated that Integrated Resources would not be interested in financing or buying these facilities for the following reasons:

- There is no residual value at resale because these operations are on a military base.
- Any sale at midlife constitutes the discounted present worth of the remaining contractual payments.

He also indicated that since there is no capital gains tax in Germany, very low cash returns and the opportunity for healthy appreciation are the more sought after investments. This proposal is contrary to that structure. More importantly depreciation schedules in Europe are at 35 to 40 years.

7.5.3 Pension Fund

NEW YORK STATE TEACHERS FUND - New York Alan Buyer (518) 447-2666

The fund would not purchase the property, but would finance based on the Army's lease. Mr. Buyer indicated they would not finance 100 percent, but by law are restricted to a 75 percent loan to value ratio, thereby requiring a third party intermediary to take an equity position increasing costs. Geographically, the Teachers Retirement Fund has no preferences except they are not legally chartered to make loans on foreign-based real estate.

7.5.4 Pension Fund Manager

ALDRIGE, EASTMAN AND WALTCH, INC. - Boston, Massachusetts Tom Maxwell (617) 542-9300

This proposal conforms to a mortgage since there is no residual or upside with little to no control of the real estate; therefore, requirements are a 15 percent IRR under the assumption of 6 percent inflation. Although a typical investment floor for this firm is \$3 to \$5 million, considering economies, scale and dispersion, the floor would be in the \$30 to \$50 million range in order to set-up a separate legal, accounting, and clerical departments to handle these transactions.

7.5.5 Investment Bankers

SALOMON BROTHERS - New York City (meeting) Jim Lynn (212) 747-7474 Bill Oliva (212) 747-5986

Salomon Brothers is accustomed to doing guaranteed deals. It has a Government-Guaranteed Finance Department. It is accustomed to meeting various Federal paperwork requirements. It has done asset-based ship financing under Title XI and guaranteed-debt financing for facilities built through (but not owned by) the Agency for International Development.

It is generally interested in raising financing for NAF facilities regardless of location (U.S., W. Germany). It would create appropriate financing approaches if the projects were large enough and ongoing. To qualify its interest, it needs to know details regarding the locations, types, and sizes of the projects. Its staff wishes to review the market research and economic analysis that has been completed to date. Its investment floor is \$50 million.

Salomon Brothers' compensation would be based on a percentage of funds raised when the debt (and/or equity) is placed. The percentage would be set at a competitive market rate. An up-front retainer fee also would be required if there were substantial pre-placement work.

Salomon Brothers is not interested in doing a speculative effort on this project. It is interested in working to place the financing if the Government is committed to using private resources and if there are appropriate guarantees of financial feasibility.

MERRILL LYNCH CAPITAL MARKETS/INVESTMENT BANKING DIV. - New York (Meeting) Richard T. Collier (212) 637-7059

THE CONTRACTOR OF STANDING STANDS AND STANDS OF THE STANDING STANDS OF THE STANDING STANDS OF THE STANDING STANDS OF THE STANDS OF THE STANDING STANDING

Merrill Lynch is experienced in dealing with Government agencies.

Merrill Lynch arranges an enormous amount of IRB and municipal bond

financing. Its staff is accustomed to handling Government paperwork and processes. Most recently, Merrill Lynch arranged financing for the TVA headquarters building which it now owns and leases to TVA. The \$300 million debt was placed through zero coupon bonds which were bought by institutions. The equity was placed with private investors.

It is interested in arranging financing for NAF facilities, which it sees as no different frm the TVA deal. It believes that the debt could be placed with institutions; the equity, with individuals (and corporations, if sheltered). It assumes that securities offered would not be tax exempt.

7.5.6 Operators

MARRIOTT CORPORATION/NEW BUSINESS DIVISION (telephone)
Mark Pacala 897-1165

Marriott is interested in managing (but not constructing or financing) NAF facilities in the U.S. and Germany. However, its interest is qualified: it has no experience in dealing with the Federal Government; it is not familiar with the miliatry as a customer base; it may not want to go through a competitive bidding process.

There are no specific financial criteria unless this would be considered a totally new line of business. In that case, it must have the long-term potential (10-20 years) of generating five percent of corporate profits.

If the Government is seriously interested in having Marriott manage NAF facilities, Marriott staff would like to meet with Government representatives to review the opportunity in detail.

or and the control of the control of

8. TAX/LEGAL ISSUES ASSOCIATED WITH STRATEGIES

8.1 GENERAL

The feasibility and economic viability of the financing strategies in Section 4 are influenced to a large degree by the tax and legal environment which governs real estate investment. The strategies are based on current tax laws and other applicable statutes as of October, 1984. There are five areas of concern which will have an effect on the strategies and which need to be carefully considered by the Army before actual contracts are let: 1) the tax exempt status of the NAFI; 2) the depreciation rules for property leased to a tax exempt entity; 3) the possessory use tax; 4) the rules governing revenue generated from the lease of Government owned land; and 5) the application of the Davis-Bacon Act to NAF-MC projects. These issues are discussed on the following sections.

8.2 TAX EXEMPT STATUS OF THE NAFI

The use of private contractors in the operation of NAFIs can potentially disqualify the NAFI's tax exempt status. This can have a significant impact in several areas; the consumer would have to pay sales tax, the investor's depreciation methods for the building for tax purposes may change, the contractor may become liable for possessory use tax (property tax), and the NAFI operation may become liable for income tax. The only strategy which is specifically designed to operate the NAFI as a <u>non-tax exempt</u> entity is the concession arrangement with full operation of the facility as a private venture. The other strategies are envisioned as remaining tax exempt.

According to JAG staff, tax exempt status is preserved as long as the Army, rather than the contractor, purchases all goods for resale, maintains separate bookkeeping for income and expenses, and as long as the contractor does not profit directly from the sale of goods at the

facility. These rules should be carefully reviewed and incorporated in contracts for strategies where the tax exempt status is to be preserved.

8.3 DEPRECIATION RULES FOR TAX EXEMPT PROPERTY

Normal income producing real estate can be depreciated for tax purposes over an 18 year period using the Accelerated Cost Recovery System (ACRS) resulting in a significant income tax deduction for the investor. However, the Tax Reform Act of 1984 changed the depreciation rules for property leased to tax exempt entities. These are called "disqualified leases" and straight line depreciation for the greater of 40 years or 125% of the useful life must be used for tax purposes. This will have a negative impact on the investor's cash flow and subsequently will cause an increase in the cost of the facility to the Army. However, it is possible to avoid having the property treated as a disqualified lease.

A lease of 18 year real property to a tax exempt entity is considered a disqualified lease if at least one of the following circumstances exists: (Code Sec. 168(j)(3)(B)(iii))

- (1) The lease has a term of more than 20 years.
- (2) All or part of the property was financed (directly or indirectly) by an obligation the interest on which is exempt from Federal income tax under Code Sec. 103, and the tax exempt entity (or related entity) participated in the financing.
- (3) Under the lease there is either (a) a fixed or determinable purchase price or sale option which involves the tax exempt entity (or related entity), or (b) the equivalent of such an option.
- (4) The lease occurs after the sale or other transfer or lease of the property by or from the tax-exempt entity (or related entity), and the property has been used by the entity (or related entity) before the sale or other transfer or lease.

Property is not considered leased in a disqualified lease under (4) above if the property is leased back within three months after the date the property is first used by the tax exempt entity (or a related entity). (Code Sec. 168(j)(3)(8)(v)). Thus property owned and used by a tax exempt entity (or a related entity) for three months or less before it is transferred by the tax exempt entity (or related entity) is not treated as used by that entity before the transfer. (Conf Rept p. 783) 1

These items should be carefully reviewed by the Army prior to soliciting proposals for financing and every effort should be made to avoid "disqualified leases" on NAF projects for those instances where the NAFI retains its tax exempt status.

3.4 POSSESSORY USE TAX

exempt from state and local taxes including property and ad valorem taxes. However, Title 10 USC 2667 states that when the property under U.S. Government control is used by a private venture, the local government can be allowed to impose a tax against the entity called a "possesory use tax" which is similar to a property tax. The tax is based on the private entity's proportionate interest in the property. Further, by law, if such a tax is imposed after a lease is ratified, the lease can be renegotiated. There are several precedents which should be considered before contracts are established for financing.

The Holstein and Oak Ridge atomic fuel plants in Tennessee are both operated by contractors for the Government on Government-owned land. In both cases the local tax authority has ruled that the contractor has an interest in the property and has imposed a possessory use tax.

¹The RIA Complete Analysis of the Tax Reform Act of 1984.

The Army should carefully consider the financing strategies and the attitude of the local tax authority prior to implementing any strategies to take this potential expense into account.

3.5 REVENUE GENERATED FROM GROUND LEASES

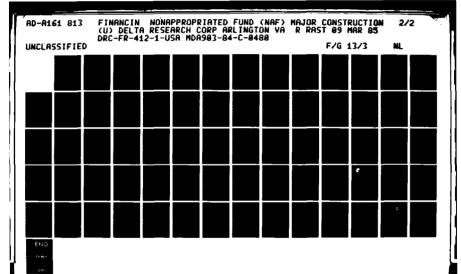
Title 10 USC 2667 allows the Secretary of a military department to lease Government property to private sector entities. However, the law requires that money rentals received shall be covered into Treasury except for those amounts required to cover administrative expenses. A concession contract between the Army and a contractor who operates a facility as private venture must take this into account so that the moneys received can be retained in the NAF account.

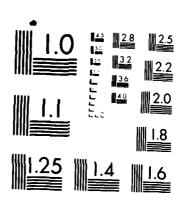
3.6 DAVIS-BACON ACT

The Davis-Bacon Act (40 USC 276) requires that "prevailing wage notes" be payed for construction labor working on Federal construction projects. There have been some differences of opinion as to the extent of the application of the Act for projects built using the financing strategies in Section 4. An opinion from DACF-ZJ states that the Act will apply only to "construction labor employed directly on the site of work."—Other DA and DOD personnel have expressed opinions that range from very broad applications of the Act to no application at all for concession and franchise arrangements. There are no clear legal precedents available for this application and the potential construction cost impact of the Act can be significant. We recommend that this issue be carefully reviewed and a definite position taken by "JSACFSC as part of the strategy implementation plan.

APPENDIX A

USER'S MANUAL





MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A

USER'S MANUAL OUTLINE

- 1.0 INTRODUCTION
- 2.0 GETTING STARTED
 - 2.1 GENERAL INFORMATION
 - 2.2 FINANCIAL DATA
 - 2.3 OPTIONS
 - 2.4 RESULTS
 - 2.5 CASH FLOW SUMMARY
- 3.0 ENTRIES
 - 3.1 DATA
 - 3.2 OPTIONS
- 4.0 RESULTS
- 5.0 CASH FLOW ANALYSIS
 - 5.1 INTRODUCTION
 - 5.2 HIGHLIGHTS OF THE MODEL ASSUMPTIONS AND ISSUES
 - 5.2.1 TIME PHASED COSTS
 - 5.2.2 INCOME
 - 5.2.3 OPERATIONAL INCOME
 - 5.2.4 NET OPERATING INCOME
 - 5.2.5 DEBT RELATED CASH FLOW
 - 5.2.6 EQUITY COST
 - 5.2.7 BEFORE TAX CASH FLOW
 - 5.2.8 TAX ADJUSTMENTS
 - 5.2.9 CAPITAL GAINS AND LOSSES
 - 5.2.10 TAXABLE INCOME
 - 5.2.11 INCOME TAX CALCULATIONS
 - 5.2.12 MINIMUM TAX CALCULATIONS
 - 5.2.13 AFTER TAX CASH FLOW
 - 5.2.14 ARMY AND TREASURY VERSIONS
- 6.0 EXAMPLE

1.0 INTRODUCTION

Delta Research Corporation has prepared this cash flow analysis model for financing Nonappropriated Fund (NAF) major construction under contract No MDA 409-84-C-0480 for Department of the Army Adjutant General (DAAG-NFF-M). The model utilizes the Lotus Development Corporation, Lotus 1-2-3 software and requires tha the user have this software available. In general, the purpose of the model is to find the best among several third party construction financing strategies in order to maximize the benefits of all the parties involved. These parties are: the private sector (an individual or a Corporation), the Army, and the Treasury. The private sector is looking for an after tax cash flow that gives an internal rate of return (I.R.R.) greater than its minimal attractive rate of return (MARR). Similarly, the Army is looking for a cash flow that yields a positive net present value (or at least to minimize negative net present values). Finally, the Treasury is concerned with the increase or decrease in tax revenues resulting from the financing arrangement between the army and the private sector.

First, the strategies of financing arrangement must be defined. It should be clearly established who is responsible for the different incomes and expenses, the initial investment and the facility improvements. Then, the data for each strategy is introduced in the program. Following this, a series of iterations are performed in order to find the least annual lease payment that yields an internal rate of return that satisfies the private investor. The net present value of the Army and the Treasury cash flows for this I.R.R. are then analized and if they are satisfactory a solution had been found. Otherwise, it may be necessary to modify the strategy and repeat the analysis.

MARR is the rate at which the party is willing to invest for projects of equal risk.

2.0 GETTING STARTED

A certain amount of data entry is required for the execution of the program. This data entry is structured in a way that facilitates both the entries themselves and the presentation of results. The model is designed so that performing iterations and sensitivity analysis requires a minimum of movement within the program.

Program use is divided in five sections:

- a. General Information
- b. Financial Data
- c. Options
- d. Results
- e. Cash Flow Summary

These sections are interrelated so any changes in one section may affect the others. The following sections describe the actual inputs and operation of the program. Line numbers refer to title references within the program rather than LOTUS line numbers. For reference, an example of the program is included beginning on page A-32.

2.1 General Information

The purpose of this section is to provide data for predicting the annual expenses of a specific facility. The program contains data to predict these costs for most NAF facility types based on regression analysis of actual data. The regression analysis utilizes both square footage and total annual income as predictors. The calculations are performed outside of the printing range of the program (Col. AI) and the results are entered automatically into the program (line 5.3). The operation will not be performed until the three variables (building, type, square footage, and total income) are entered. If the user prefers, this

data can be entered manually. Care should be taken to avoid destroying the data by doing this.

2.2 Financial Data

The financial data section covers almost all the data entry and it is the most important. It asks the user to provide all the financial data necessary to perform the calculations. The most important feature of this section is that the decisions of "who pays for what", that define the different strategies, are placed here.

2.3 Options

To give even more flexibility to the program, some options concerning the financial data were introduced. Some of these options require additional information depending on their answer. Provisions for this are made in lines 7.0 and 8.0 of the data entry section.

2.4 Results

The expected cash flows for each of the three parties involved in the model are presented here. In addition, a total estimate of the facility cost is also given. Note that the annual lease payment is a data entry rather than a result. It is included in this section to facilitate any iteration process.

2.5 Cash Flow Summary

A summary of the expected cash flow for the proposed strategy is given on a separate sheet. This gives a clear vision of the way the model calculates the private sector after tax cash flow, as well as the respective Army and Treasury cash flows.

3.0 ENTRIES

3.1 <u>Data</u>

In order to facilitate quick entry of the data, use of the manual calculation function (/WGRM) using F9 key is strongly recommended. Each line of the data entry is described using the numeration of the program to facilitate reference.

1.0 General Information

1.1 Building Type

Select from the listing of eight building facilities, on the right, the corresponding, number of the desired building type. Only one type of facility can be chosen at a time.

1.2 Square Footage

Enter the actual amount of square feet of the facility type selected above.

1.3 Estimated Total Annual Income

The model is set up to automatically enter this figure (AUTO) as the addition of the annual operating income plus other income (lines 5.2.1 and 5.2.2) so no value is enetered here. This cost must be at the first operating year.

10.

2.0 Capital Costs

2.1 Construction Costs

The construction costs is entered automatically by the model (auto). This figure comes from the product of the facility square footage and the average cost per square foot for that building type. This cost is escalated from 1985 to the construction starting year (line 10.0) using the user supplied inflation rate (line 6.5)

2.2 Equipment Component #1

Enter the cost of the major equipment utilized in the respective building type, such as bowling machinery in the bowling center.

2.3 Furnishings Component #2

If applicable, enter the cost of furnishings utilized in that building facility.

2.4 Total Equipment Component

The model is set up to automatically enter (AUTO) the addition of the equipment component #1 (line 2.2) and furnishing component #2 (line 2.3).

obs. Connecto despendences. Professional Personales Personales.

3.0 Investor Lending Parameters

3.1 Construction Financing

3.1.1 Construction Loan % Debt

Enter, in decimals, the percentage of the construction cost to be porrowed.

3.1.2 Construction Loan Interest Rate

Enter, in decimals, the interest rate of the construction loan.

3.2 Permanent Financing: Loan Years

Enter the number of years in which the loan must be repaid.

3.2.1 Permanent % Debt

Enter, in decimals, the percentage of the permanent debt to be financed.

3.2.2 Permanent Loan Interest Rate

Enter, in decimals, the interest rate of the permanent loan.

3.3 Equipment Financing

3.3.1 Equipment/Inventory Loan % Debt

Enter, in decimals, the percentage of the total cost of the equipment to be financed.

3.3.2 Equipment/Inventory Loan % Debt

Enter, in decimals, the interest rate of the equipment loan.

4.0 Investor's Tax: Minimum Tax Rate

Enter, in decimals, the investor's minimum tax rate. (Note, this is different from income tax. Currently, the rate for individuals ranges from 0 to 20%).

4.1 State Income Tax Rate

Enter, in decimals, the investor's state tax bracket.

4.2 Federal Income Tax Rate

Enter, in decimals, the investor's federal tax bracket.

- 5.0 Investor/Army Responsibilities
 - 5.1 Initial Investment Working Capital

Enter the amount available for initial investment. Select which party (Army or Private) is going to assume this cost. If Army, enter 1 in column C; if private, enter 0.

- 5.2 Annual Income First Operating Year
 - 5.2.1 Operating Income

Enter the gross income, at the first operating year, generated from sales of goods, such as those made in dining rooms, bars,

package stores, etc. This gross income is the difference between the cash sales and the cost of goods sold.

5.2.2 Other Income

Enter the income, at the first operating year, generated from other activities different from sales of goods, such as services, bowling fees, golf equipment rentals, etc.

5.3 Annual Expenses

- 5.3.1 Utilities
- 5.3.2 Repair and Maintenance
- 5.3.3 Services
- 5.3.4 Payroll
- 5.3.5 Supplies
- 5.3.6 Insurance
- 5.3.7 Administrative
- 5.3.8 Other

All these expenses will be automatically calculated (AUTO) from all the entries in line 1.0. Selection as in line 5.1. These costs will be escalated at the first operating year. If the user has better data it can be entered here.

5.4 Cost of Major Improvement

5.4.1 Improvement # 1 (10 Years)

Enter the expected amount of major improvement to the facility, ten years after beginning operations. Selection as in line 5.1.

5.4.2 Improvement #2 (15 years)

Enter the expected amount of major improvement to the facility, fifteen years after beginning operations, Selection as in line 5.1.

6.0 Life Cycle Parameters

6.1 Construction Period (Months)

Enter the number of months that the construction is expected to last.

6.2 Building Straight Line Life

Enter, in years, the expected life of the building for depreciation purposes.

6.3 Equipment Component #1 Life

Enter, in years, the expected life of the Equipment Component #1.

6.4 Furnishings Component #2 Life

Enter, in years, the expected life of the furnishings component #2.

6.5 Flexible Purchase Price (0=S.L.)

Enter the expected market value of the facility at the year of sale. Enter 0 if that amount is expected to be equal to the depreciated value (straight line) of the property.

6.6 Assumed Annual Inflation Rate

Enter, in decimals, the expected annual inflation rate.

7.0 If option 3 or 4 is yes (1), enter fee

If a concessionaire fee is desired (Option 3), enter the fee in decimals. If a franchise fee is desired (Option 5), enter the fee in decimals. Note that these alternatives are mutually exclusive. Selecting none of them is also possible. Both fees will reflect a percentage of gross income.

3.0 If Option 4 is Variable (0), enter variable rates starting year 1 (Col. E).

If variable permanent loan interest rate is desired (Option 4), enter the rates horizontally starting from column E.

9.0 Area Cost Factor

Enter the Military Construction (MCA) area cost factor related to the site where the facility is going to be built. Area cost factors are published annually as part of AR415-17 by DAEN-ECE-S.

10.0 Construction Starting Year (2 digits)

Enter the expected year of starting the construction of the facility. Only the last two digits should be entered such as 89 for 1989.

3.2 OPTIONS

1. If Escalation of the lease payments is desired, enter 1 in Column K. If a fixed value through the years is desired, enter 0.

- 2. There are two mutually exclusive options for calculations depreciation: Straight line and Accelerated Cost Recovery System (ACRS) in 18 years. If the former is desired, enter 0 in column K. If the latter is desired, enter 1.
- 3. If concessionaire fee is desired, enter 1 in column K and go to line 7.0. Otherwise, enter 0.
- 4. If variable permanent loan interest rate is desired, enter 1 in column K and go to line 3.0. If a fixed rate is desired, enter 0.
- 5. If franchise fee is desired, enter 1 in column K and go to line 7.0. Otherwise enter 0.

4.0 RESULTS

It must be remembered that the annual lease payment (3.) should be entered before obtaining any results.

- 1. The total facility cost is the total cost of the construction, including equipment, initial investment, design and construction loan interest.
- 2. The internal rate of return (I.R.R.), by definition, is the discount rate at which the net present value of a cash flow is equal to zero. For this study, the I.R.R. is calculated for the private party's after tax cash flow. This party will compare the I.R.R. to its minimal attractive rate of return in order to make an investment decision.

It should be noted that cash flows with more than one change of signs may have more than one I.R.R.. According to Descarte's rule, a cash flow can have as many I.R.Rs as there are changes of signs. These I.R.R. can be either positive, negative or imaginary. This latter means that no real I.R.R. will satisfy the compound interest equation.

Exhibit 4-1 shows an example of this type of cash flow. It can be noticed in the sample cash flow that there are two sign changes. The first one is from year 0 to 1 and the second one from year 9 to 10. Based on Descarte's rule, at least two internal rates of return should be found on this cash flow.

However, knowing the number of possible I.R.R. is not sufficient information. Negatives and imaginaries I.R.R. do not make any economical sense. Therefore, the number of positive I.R.R. should be determined. A general guideline to do this is by the cummulative sum of the inflows and outflows on each year. The number of times that the sign changes in this cummulative sum is the number of positive internal rates of return.

EXHIBIT 4.1 MULTIPLE INTERNAL RATES OF RETURN

D

-5e39 -760 9 950 4360 3504 909 2730 859 *** SAMPLE CASH FLOW *** 1990 909 1100 89 300 450 -150 -699 -1050 -1500 -1580 CUMULATIVE SUM: 2 SIGN CHANGES: YEARS 2 SIGN CHANGES:

 0.250
 0.375
 0.5
 0.625
 0.75
 0.875
 1

 -92.93
 -367.31
 -590.06
 -754.83
 -675.73
 -965.85
 -1034.57
 ane I.R.R. VS. N.P.V. nam 0.206 N.P.V. = RATES =

and productional transfer to assessment between

Exhibit 4-1 shows two sign changes on the cummulative sum meaning two positive I.R.R. If the outflow in year 10 had been -4,300 or less there would only have been one change of sign in the cummulative sum and thus only one positive I.R.R. The other I.R.R. would have been either negative or imaginary.

Recalling that the I.R.R. is the rate at which the net present value (N.P.V.) is zero, the two positive I.R.R. of the example are found in the I.R.R. versus N.P.V. Table in Exhibit 4-1. The two rates are 7.4% and 20.6%.

Now, a question arises: how do we know which of the two I.R.R. is the correct one? According to J. R. Canada, "whenever multiple answers such as this exist, it is likely that neither is correct." This difficulty is one of the objections given to the use of I.R.R. method for the ranking of investment opportunities.

M. G. Wright suggests an effective way to overcome this problem by compounding one of the outflows to the preceding year, utilizing the cost of capital of the business as interest rate. Then he states that "if the figure is positive, then proceed with the evaluation of the project in the normal way. If it is still negative, discount back a further year until a positive figure is arrived at." Exhibit 4-2 shows an example of this "auxiliary" discount rate method applied to the sample cash flow. Assuming a cost of capital of 15%, the last outflow of -5,000 is discounted to year 9. Since the total value is negative, another year is discounted.

D

John R. Canada, <u>Intermediate Economic Analysis for Management and Engineering</u>, Prentice-Hall, Englewood Cliffs, N.J., 1971, p. 73.

M. G. Wright, Discount Cash Flow, 2nd Edition, McGraw-Hill, N.Y., 1973, p. 67.

EXHIBIT 4.2 "AUXILIGRY" DISCOUNT RATE METHOD.

| ASSUMED INTEREST RATE = | 15. 60x | | | | | | | | | | |
|----------------------------------|---------|-----|-----|-----|-----|--------|---------|--------------|--------------|--------------|------|
| YEARS | • | | ત્ય | т | • | נט | 4 | 7 | 60 | 6, | 10 |
| INITIAL CASH FLOW = | -1500 | 450 | 450 | 450 | 450 | 909 | 969 | 959 | 800 | 633 | WJ5- |
| FIRST DISCOUNT: | -1500 | 450 | 450 | 450 | 450 | 684 | ଚନ୍ଦ | 909 | 809 -3 | 803 -3547.82 | |
| SECOND DISCOUNT: | -1500 | 459 | 450 | 459 | 450 | 864 | BAN | B
የትሪ | BNט -2285.07 | | |
| THIRD DISCOUNT: | -1500 | 450 | 450 | 450 | 450 | 808 | 9%9 | Beg -1187.61 | | | |
| FOURTH DISCOUNT: | -1500 | 420 | 450 | 450 | 450 | 888 | -232.19 | | | | |
| FINAL CASH FLOW = | -1500 | 450 | 458 | 450 | 450 | 538.10 | | | | | |
| INTERNAL RATE OF RETURN = 17.20% | 17.20% | | | | | | | | | | |
| | | | | | | | | | | | |

This is done until this value becomes positive, as it is shown on the final cash flow. The I.R.R. for this cash flow is 17.2%.

Other authors such as J. J. Clark et al. 4 and D. E. Peterson agree with the approach of utilizing an "auxiliary" discount rate in order to select the appropriate I.R.R. Nevertheless, the analyst should be aware that manipulation of the cash flow, such as the one mentioned before, will provide answers sensitive to the form of the cash flow as well as to the "auxiliary" interest rate used. In general, the less manipulation of the cash flow and the closer the "auxiliary" interest rate to the calculated answer, the less the variation in the final I.R.R.

The model is set up to give the correct I.R.R. in the cases that only one positive answer exists. An error prompt (ERR) in the I.R.R. solution cell means either that no positive solution exists or that the positive solution is too big to be calculated by this function. Provisions are given on lines 6 and 7 for the cases where no solutions or two or more solutions exist for the given cash flow.

- 3. The annual lease payments may be changed iteratively in order to find the results that best suits the needs of all the parties.
- 4. The Army net present value is the present worth of the Army cash flow assuming a discount rate of 10 percent. It reflects the current value of Army funds necessary to undertake the financing arrangement.

John J. Clark, T. J. Hindelang, R. E. Pritchard, <u>Capital Budgeting:</u> <u>Planning and Control of Capital Expenditures</u>, Prentice-Hall, Englewood Cliffs, N. J., 1979, pp. 104-108.

D. E. Peterson, A Qualitative Framework for Financial Management, Richard D. Irwin, Inc., Homewood, Illinois, 1969, pp. 318-320.

The cash flow is obtained by subtracting the operational expenses (when appropriate) and the property expenses from the Army total income cash flow.

- 5. The Treasury net present value is the present worth of the Treasury cash flow assuming a discount rate of 10 percent. It reflects the current value of tax revenues resulting from the specific financing arrangement. The cash flow is obtaining by subtracting the state tax from the total tax payments made by the private sector.
- 6. This line is used only as a signal to the analyst. It shows the number of positive I.R.R. solutions. Only when this value is greater than one, should the user be concerned about the problem of multiple I.R.R. mentioned before.
- 7. If the number of positive I.R.R. is greater than one, the model will provide automatically only the value of the second I.R.R. It is possible but not commonly experienced in practice, to have situations in which there is more than two positive I.R.R.

5.1 Introduction

The forecasting of cash flows over the life of a particular investment alternative is a crucial step in the overall investment process. This enables the investor to develop one of the most important tools used in analyzing investment alternatives: the After-Tax Cash Flow (ATCF) statement. Further, the interest rate (or discount rate) which equates the present value of cash inflows to the present value of cash outflows is termed the Internal Rate of Return (IRR). In a sense, solving for the IRR associated with the after-tax cash flow is the "bottom line" in evaluating alternative investment projects. The IRR represents the after-tax earning power of a specific investment.

A simple example illustrates the concept. A private individual in the 50 percent tax bracket is interested in knowing the after-tax earning power of a specific investment opportunity. The investment would require an initial outlay of \$60.00. During the following two time periods, the investor expects to receive income of \$100.00 per period and to incur operating expenses of \$20.00 and \$27.30. The after-tax cash flow statement for this simple example is shown in Exhibit 5-1. The ATCF stream reported in the table reflects an 18 percent IRR since:

$$\frac{-50}{(1+.18)^0} + \frac{40}{(1+.18)^1} + \frac{36.35}{(1+.18)^2} = 0$$

$$-60 + 33.90 + 26.10 = 0$$

EXHIBIT 5-1 ATCF STATEMENT

| - | TAAC | | O 7 | \sim |
|---|------|----------|-----|--------|
| | IME | ₽ | ~ 1 | OD. |
| 1 | 1111 | | 1/1 | \sim |

| | 0 | 1 | 2 |
|----------------------|----------|----------|----------|
| INCOME | 0. | \$100.00 | \$100.00 |
| OPERATING EXPENSES | 0. | -20.00 | -27.30 |
| NET OPERATING INCOME | 0. | 80.00 | 72.70 |
| EQUITY COST | \$-60.00 | 0. | 0. |
| BEFORE-TAX CASH FLOW | -60.00 | 80.00 | 72.70 |
| INCOME TAXES (50%) | 0. | -40.00 | -36.35 |
| AFTER-TAX CASH FLOW | -60.00 | 40.00 | 36.35 |

EXHIBIT 5-2 EXPANDED ATCF STATEMENT

TIME PERIOD

| | | 0 | 1 | 2 |
|--------------------------|--|--------------------|--|--|
| 1.0
2.0
3.0
4.0 | Income Operational Expenses Net Operating Income (1.0 + 2.0) Debt Costs (d.) | 0
0
0 | 100.00
-20.00
80.00
-29.59 | 100.00
-27.00
72.70
-29.59 |
| | a) Beginning Balance (e.) b) Interest c) Principal d) Payment (b.+c.) e) Remaining Balance (a.+c.) | -
-
-
-50 | -50.00
-6.00
23.59
-29.59
-26.41 | -26.41
-3.18
-26.41
-29.59
0 |
| 5.0
6.0
7.0 | Equity Cost
Before Tax Cash Flow (3.0+4.0+5.0)
Tax Adjustments (+=credit)(a.+b.) | -10
-10
-10 | 0
50.41
-23.59 | 0
43.11
-26.41 |
| | a) Principal on debt (c.)b) Equity Cost (5.0) | 0
-10 | -23.59
0 | -26.41
0 |
| 8.0
9.0
10.0 | Taxable Income (6.0 - (7.0)) Tax Payments (8.0 (- 0.5)) After Tax Cash Flow (6.0 + 7.0) | 0
0
-10 | 74.00
-37.00
13.41 | 69.52
-34.76
8.35 |

The simple example begins to become more complex when more realistic financial strategies and tax implications are introduced. Suppose now that the investor elects to put \$10.00 down as equity financing and borrow \$50.00 at 12 percent for the two years being considered. Exhibit 5-2 reports the expanded ATCF statement which reflects an IRR of 80.39 percent, since:

$$\frac{-10}{(1+0.8039)^0} + \frac{13.41}{(1+0.8039)^1} + \frac{8.35}{(1+0.8039)^2} = 0$$

$$-10 + 7.43 + 2.57 = 0$$

The huge increase in the internal rate of return (from 18 to 80.39 percent) illustrates the power of financial leverage on after-tax earning potential. However, before manipulating these calculations under alternative financial arrangements, several comments concerning the expanded ATCF statement in Exhibit 5-2 are required. The two major additions are categories for debt related costs and categories for tax adjustments.

Subtracted from net operating income are debt service costs (both principal and interest) and equity costs to yield before-tax cash flow. All cash inflows and outflows are taken into account to derive before-tax cash flow except for tax considerations. There are several adjustments to before-tax cash flow to yield taxable income and subsequently the tax liability incurred. After-tax cash flow is simply before-tax cash flow less all tax payments. Referring to Exhibit 5-2, there are two tax adjustments. The first is that principal on debt service is not deductible for income tax purposes. The second element, equity cost (payments), is also not deductible for income tax calculations. Hence, both of these elements are added to before-tax cash flow to yield taxable income. The tax payment is 50 percent of taxable income and after-tax cash flow is before-tax cash flow less total tax payments.

The simple example is intended to introduce the basic concepts of cash flow analysis. The cash flow model developed for this project is capable of evaluating many more considerations than those reflected in the simple example. Perhaps the most obvious considerations are a more broad view of the parties involved and the possible components of cash flow that accrue to each party. There are three major parties involved: The Army, the private sector (an individual or corporation), and the Treasury. The Treasury is concerned with the increase or decrease in tax revenues resulting from the leasing arrangement between the Army and the private sector. The Army, in defining this arrangement, may be responsible for operating income and/or certain operational expenses (utilities, operating supplies, etc.) in addition to the annual lease expenses. The private sector will be responsible for the remaining components of cash flow. Consider the following issues which must be addressed in evaluating some of these components of cash flow.

- The method of debt financing -- There may be more than one debt instrument, alternative interest rates, number of years, and degree of equity financing. Also, the possibility of variable as well as fixed rate financing must be taken into account.
- The method of calculating depreciation -- The two major alternatives include straight line and the accelerated cost recovery system (ACRS). The 1984 Tax Reform Act affects both methods. Further, depreciation of major improvements to the facility as well as building components and their service lives must be evaluated, etc.
- The method of determining capital gains (losses) will vary depending on the private sector being a corporation or an individual. The basis of the gain, excess depreciation (ACRS over straight line) and the preferential tax treatment of capital gains must be considered.
- The anticipated inflationary impact on operational expenses and operating income needs to be analyzed. Also it may be desirable to have a lease arrangement where the lease payment escalates with inflation.

- The method of recovering initial inventory and working capital expenditures should be addressed, and which party is to incur these costs.
- The procedure for determing the minimum tax liability resulting from tax preference income needs to be evaluated. Preference income is derived from accelerated depreciation and capital gains.
- These and other issues such as the uncertainties associated with building costs, tax law, and legal constraints have been considered during the preparation of the cash flow model. The following section addresses these points in more detail.

5.2 Highlights of the Model -- Assumptions and Issues

The major aspects of the project which have been considered, including the assumptions and issues, are presented in this section. One major assumption inherent in the model is that the tax and legal framework will remain as it is today. This framework changed drastically in 1984 and is likely to change in the near future. It is very difficult to forecast IRS tax rulings and/or Congressional actions. This institutional assumption, although necessary, limits the utility of the model. However, the model is fully capable of anticipating private sector financial responses to the Army's desire to lease MWR facilities.

The section is organized around major categories of after-tax cash flow. There are two versions of the model, one reflecting corporations and the other indiviuals, due to different tax considerations. Both versions are discussed together.

5.2.1 Time Phased Costs

The purpose of this section is to allocate the different components of the total facility cost according to their respective performance time during each year period. A constant design time of one year is assumed, the design cost is calculated by multiplying the construction

costs by an assumed constant fee of 15.5 percent which includes architects fee, other professional fees, and construction management. The capitalized interests are the total amount of interest paid in the construction/design loan, equipment loan and working capital loan. They are calculated in the model in lines 4.1.3, 4.2.2 and 4.3.2 respectively. The summation of all the entries is shown on the results as total facility cost.

5.2.2 Income

The first category of cash flow is the anticipated income resulting from the initial investment. It includes the amount of lease payment (1.1), operating income (1.2) and other income (1.3) in year zero (depending on the responsibility option). These are allowed to increase with the anticipated rate of inflation over the time period (the inflation of the lease is optional). The sale of property (1.4) enters the amount of the flexible purchase price at the year of sale. Note however, that to be eligible for the ACRS depreciation the lease must be for 20 years or less and the purchase price must be at fair market value among other conditions.⁶

5.2.3 Operational Expenses

Some or all of these expenses are the responsibility of the party (Army or private sector) specified in the lease arrangement. The categories of operational expenses include:

- Utilities
- Repairs and Maintenance
- Services
- Payroll

- o Supplies
- o Insurance
- o Administrative
- o Other
- o Concessionaire Fee

Tax Reform Act of 1984, Section 168 (j) (3).

An implied assumption is that the operational expenses would be the same regardless if the private sector or the Army operated the facility. Also, the capability exists for these expenses to increase with the anticipated rate of inflation.

5.2.4 Net Operation Income

This simply reflects the difference between Income and Operational Expenses.

5.2.5 Debt Related Cash Flows

Debt related cash flows include all of the cash outlays associated with cebt services (principal and interest) for all of the debt instruments used during construction of the facility and during its operation. For this discussion it is useful to divide debt services into two categories: debt associated with the facility construction and debt pertaining to facility operations. It is assumed there are no cash outlays associated with the construction debt. There is no repayment of principal and all interest is capitalized until the facility becomes operational and the lease payment begins. When the facility begins to generate income, permanent financing is secured which is used to pay-off all of the construction debt. Beginning with the permanent financing are the cash outlays for debt service. The terms of the permanent financing are relatively flexible and include allowance for variable or fixed interest rate conditions among other alternative financing terms.

5.2.6 Equity Costs

The equity costs are those funds financed exclusively by the private sector investor. The model assumes that equity funds are spent first in order to minimize interest charges. Also, the model assumes that all major improvements to the facility which are the responsibility of the

private sector, are financed entirely from equity funds. The equity costs are determined by user supplied inputs specifying the percent debt financed, facility cost, etc.

5.2.7 Before-Tax Cash Flow

Before-Tax Cash Flow (BTCF) is simply the net operating income less the debt and equity costs. At this stage all cash inflows and outflows have been considered except for taxes.

5.2.8 Tax Adjustments

This category of cash flow analysis modifies before-tax cash flow to derive taxable income for income tax purposes. Total tax adjustments consist of the following elements which are added or subtracted from before-tax cash flow.

- Equity costs are not deductible for income tax purposes and thus are added to BTCF.
- Principal on debt is also not deductible for income tax purposes.
- Proceeds for the sale of the facility is not treated as ordinary income, but as a capital gain. Capital gains are discussed in the next section. Proceeds from sale are subtracted from BTCF.
- Excess depreciation income can only occur in the period of selling the facility and is equal to the facility residual value based on straight line depreciation over the residual value based on ACRS depreciation (if allowable). Excess depreciation is treated as ordinary income rather than a capital gain and is added to 3TCF.
- Reduced gain income (15%) applies only if the private sector investor is a corporation. From the total capital gain, 15 percent is treated as ordinary income and is added to BTCF.
- Depreciation, whether ACRS or straight line is subtracted from BTCF to derive taxable income.

5.2.9 Capital Gains And Losses

Individuals

The treatment of capital gains and losses is significantly different for individuals and corporations. These differences are:

| Long-term capital gain deduction allowed | No capital gain deduction |
|--|---|
| Capital loss deduction allowed in year sustained | No capital loss deduction in year sustained |
| Carryforward of capital losses until used up; no carryback | Capital losses carried back
3 years and forward 5
years |
| No alternative tax | Maximum alternative tax is |

Net capital gain deduction is a tax preference item for alternative minimum tax

39.13% of excess net longterm capital gain is a tax preference item

28%

Corporations

To briefly summarize the capital gain calculations, the gain is determined from the sales price less the residual value based on straight line depreciation. If the private sector is an individual, 60 percent of the gain is deducted and the remaining 40 percent is taxed at ordinary income rates. The 60 percent deduction is a preference item and figures into the alternative minimum tax calculations discussed below. If the private sector is a corporation, 15 percent of the gain is treated as ordinary income, the remaining 85 percent is taxed at the alternative tax rate of 28 percent. Finally, 39.13 percent of the reduced gain is a preference item and enters the minimum tax considerations.

Capital losses are not discussed here but have been incorporated in the model. The final report will document the procedures.

5.2.10 Taxable Income

Taxable income is before-tax cash flow plus tax adjustments and, if the private sector is an individual, includes 40 percent of any capital gain.

5.2.11 Income Tax Calculations

Both state and federal taxes are calculated in this phase. The state taxes are assumed to be 5 percent of taxable income and are deductible from Federal taxable income. The Federal tax rate is 50 percent for individuals, and 46 percent for corporations. Note, all tax liabilities are determined at marginal rates.

5.2.12 Minimum Tax Calculations

The minimum tax and alternative minimum tax are figured on benefits received in the form of deductions, lower tax rates and exclusions from tax. These benefits are known as tax preferences or tax preference items because they result in preferential treatment given in the tax law. Generally, only the amount of the benefit received minus the benefit that would otherwise be allowed is counted as a preference item.

There are two potential areas of preference items: 1) excess depreciation and 2) capital gain preferences. The excess depreciation preference is calculated every year as the total ACRS deduction (if taken) less the depreciation deduction if straight line methods are used. The capital gain preference item is the 60 percent deduction if an individual and is 39.13 percent of the reduced gain (85%) if a corporation.

From the total preference items are subtracted an appropriate deduction. This deduction is:

- If an individual, the smaller of interest payments used to finance the investment or after tax investment income (excluding the minimum tax liability).
- If a corporation, the regular income tax not including the minimum tax.

The resulting amount is multiplied by 15 percent if a corporation and 20 percent if an individual to derive the minimum tax liability.

5.2.13 After-Tax Cash Flow

The after-tax cash flow, as mentioned earlier, is the before-tax cash flow plus income tax, capital gains tax and minimum tax payments. The ATCF reflects all cash inflows and outflows associated with a specific investment. The internal rate of return is the interest rate that equates cash inflows with cash outflows. The internal rate of retrun reflects the earning power of a particular investment.

5.2.14 The Army and Treasury Versions

The preceding section described the process of determining the private sector cash flows. This section focuses on the Army ash flows and the implications for the Treasury Department concerning tax revenues. The Army's situation is relatively simple compared to the priduce sector since there is no debt or tax considerations. The Army may receive income in the form of operating income (bowling fees, etc.) Also, depending on the leasing arrangement, the Army may be responsible for some (or all) of the operating expenses and, obviously, the Army incurs a periodic lease payment. Finally, the Army may expend funds for the transfer of the facility title in the future. All of these elements taken together yield the Army cash flow. The Army cash flow converted to present value (assuming a discount rate of 10 percent) reflects the current value of Army funds necessary to undertake the leasing arrangement.

The Army is interested in minimizing the present value of its cash flow pertaining to a specific leasing arrangment. By changing certain model inputs, such as the depreciation method used by the private sector, the present value of the Army cash flow is substantially changed for any given IRR received by the private sector. The Army is interested in knowing and evaluating the combination of model inputs which minimize the present value of its cash flow for a given facility type. The cash flow model developed during this project provides that capability with substantial flexibility in changing model inputs.

The Treasury Department on the other hand is interested in maximizing tax revenue. The tax revenue received is the sum of the private sector income tax, capital gain tax and minimum tax payments for a specific leasing arrangement. The present value of the private sector tax payments (using a 10 percent discount rate) yields the current value of tax revenue resulting from the specific leasing arrangement.

The Army's agreement with the private sector is conducted without concern for the Treasury's position. However, to the extent the Army and private sector are indifferent, the optimal agreement is one which also maximizes the present value of tax revenues. Consider an example. The private sector will be indifferent between alternative arrangements if the IRR remains the same. The private sector may be indifferent between a relatively low periodic lease payment in exchange for a relatively high purchase price in the future. The Army will also be indifferent (conceptually) between a relatively low lease payment currently and a high purchase price in the future. However, the Treasury will maximize revenue when the purchase price is the lowest possible in order to avoid capital gain preferential tax treatment. Thus, in this situation, the optimal solution is a very low purchase price since the private sector and Army are indifferent between a high purchase price and low lease payment or a low purchase price and high lease payment, holding the IRR constant. The tax revenues are maximized with a low purchase price. Perhaps this illustrates the types of issues which are being analyzed as part of this project.

6.0 EXAMPLE ATCF ANALYSIS

This section presents an example after-tax cash flow analysis of a lease with maintenance alternative financing arrangement. The following conditions are assumed for this example (all dollar values are in thousands of dollars):

- The facility to be leased is a 31,000 square foot bowling center with 30 lanes.
- The bowling center has an assumed construction cost of \$2790, design cost equal to 15.5 percent of the construction cost, equipment costs of \$1000, and initial inventory costs of \$100.
- The design period is one year and a construction period of 18 months is assumed. There are two major improvements over the facility life: the first occurs after 10 years and cost \$275 and the second after 15 years and cost \$125.
- The design/construction/equipment and initial inventory costs are financed with 90 percent debt at an annual interest rate of 14 percent. When the facility becomes operational, permanent financing is secured with 80 percent debt at 13 percent annual interest charges for 20 years.
- The annual lease payment, operational expenses, operating income, etc. all increase at an assumed annual rate of inflation of five percent.
- The private sector party is a corporation paying state taxes of five percent and Federal taxes of 46 percent.
- The Army is assumed to purchase the bowling center after 15 years at a cost of \$500.
- The facility is depreciated using 18-year accelerated cost recovery system rates.
- The private sector is responsible for construction, maintenance, utilities, insurance and improvements of the facility.
- Neither concessionary fee nor franchise fee are considered in this case.
- The permanent loan interest rate is assumed to be fixed at 13%.

each energy of Present Personal Landson

- For construction/design purposes, an area cost factor of 1.08 is assumed.
- The construction of the facility will start in 1990.

The results for this financing strategy are found by adjusting the annual lease payments to reflect an after-tax internal rate of return of 12 percent. An I.R.R. of 12 percent is assumed adequate to entice the original investment. Exhibit 6-1 summarizes the financial results pertaining to this specific strategy.

EXHIBIT 6-1 FINANCIAL RESULTS

STRATEGY: LEASE WITH FACILITY MAINTENANCE

| • | TOTAL FACILITY COST | \$7,904.29 |
|---|--|-------------|
| • | AFTER TAX CASH FLOW I.R.R. | 12% |
| • | ANNUAL LEASE PAYMENT | \$1,042.50 |
| • | ARMY CASH FLOW NET PRESENT VALUE | \$-7,463.03 |
| • | TREASURY TAX REVENUE NET PRESENT VALUE | \$439.06 |

In general, the Army gains in terms of a lower lease payment when the private sector debt leverage is maximized and all expenses which reflect some tax preference accrue to the private sector. If the Army is relatively more risk averse than the private sector, then perhaps the operational control (income and expenses) should be the responsibility of the private sector. Methods for sharing risk may also be considered. The detailed printouts of this cash flow model are contained on the appendix.

1. SPACESCA 1200 COSTO COSTO SPACES E COSTO A GENERAL E COSTO A GARANTES E LA COSTO A COSTO A GARANTES E LA COSTO A COST

CASH FLOW MODEL
DETAILED PRINTOUTS

| 100 | | | 6 7 8 6 5 5 1 5 0 5 1 1 5 5 4 5 5 | | | | |
|---|--|------------------|---|--|----------------------|-------------|-----|
| 1 1 1 1 1 1 1 1 1 1 | 2 | 21.57.5. E | 2 - 3.C.3. C.155 | | | | |
| 1 | ATM PACE | 146.46 | 3 = 540FMG SECTIONS | | | | |
| 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, | | | क = जेरिन पाल | | | | |
| 1, 2, 2, 2, 3, 4, 4, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, | | 4.301.10 | S + NOT INS CENTER | | | | |
| 1. 1. 1. 1. 1. 1. 1. 1. | 中心 建化硫酸 医乳酸 医乳酸 | 554.68 | 6 a FATS AND CRIPTS | | | | |
| 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, | ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ ・ | 53.83 | 7 - + OJÍN CENTRA | | *** | | |
| 1. 1. 1. 1. 1. 1. 1. 1. | | 43.83 | الحناه الكفاء ف | | | | |
| 1. 1. 1. 1. 1. 1. 1. 1. | | | | | POLICE A PURCE | • | |
| 19 19 19 19 19 19 19 19 | Control of the contro | | | 41 | | | |
| 19 19 19 19 19 19 19 19 | 一、一、一、一、一、一、一、一、一、一、一、一、一、一、一、一、一、一、一、 | ** | | | | | |
| 1 10 10 10 10 10 10 10 | | 7. 7 | | 14 | | | |
| 15 17 18 18 18 18 18 18 18 | | 3 | | The section | 要注 信をと 別 乗・り | . T | . • |
| 10 10 10 10 10 10 10 10 | | 7 | | | !
! | | |
| 15 1 15 15 15 15 15 15 | | 3 4 | | 17 · · · · · · · · · · · · · · · · · · · | | | |
| 1982 1984 1985 | The first of the state of the s | 7 | | | | | • |
| 1 1 1 1 1 1 1 1 1 1 | S E. Automorphism (1980) | | | | | : | - |
| 10 10 10 10 10 10 10 10 | SOUTH SECTION OF STANKING TO SECTION OF SECT | * | | | | | |
| ## 15 Anticks of FIRE - 1. ## | 3.3.2.1. [-, 1867, 1.38 [NFAST 50]] - | <u> </u> | | A3P4030 -4 | TIME IN THE STATE | • | |
| 2.55 1 10.5 10. | CONTRACTOR OF THE SECOND SERVICES OF SECOND SERVICES OF SECOND SE | | | AHTIBEE . | | | |
| 187. at 187. | 一 我不 我 看 我 我 | \$2
~: | | | | | |
| 188 188 189 189 180 | 人名英姓 医牙 牙点次 | . 1 6 | | SPACE S | | | |
| 132.31 13.23 1 14.00 14.23 1 14.00 14.23 1 14.00 14.23 1 14.00 14.23 1 14.00 14.23 1 14.00 14.23 1 14.00 14.23 1 14.00 14.23 1 14.00 14.23 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 14.23 1 | College College Service State College | | A DESCRIPTION OF THE PROPERTY | 1 = 530 | | | • |
| 12.31 1.25 | | | • | | | | |
| 172.51 172.52 1 1 1 1 1 1 1 1 1 | | | | | | | |
| 17.2.51 17.2.52 1.2.52 | | 90 55 | • | | | | |
| 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, | Section Services of the second section of the second section s | 8 | | | | | |
| 1, 2, 3, 3 | | 16.21 | - | | | | |
| 19 19 19 19 19 19 19 19 | 41-1-14 Peri- | | | | | | |
| 1 10 12 13 14 15 15 16 17 17 17 17 17 17 17 | | 5.39 | • | | | | |
| 4-10 2-81 1 | | 17.81 | ~ | ***** | ************* | ********* | |
| 1 131 124 12 124 13 134 13 134 13 134 13 13 | | 7.4 | _ | - | 100 年 100 100 | - | |
| 1 10 20.20 1 20.20 2 20.20 2 20.20 2 20.20 2 20.20 2 20.20 2 2 2 2 2 2 2 2 2 | | 24.15 | | • | | - | |
| 1.45 | | 25 | - | # 1 101 P. F. | C.L.ITY 0067 ± | 27.5% | |
| 1.65 1.65 1 164.29 0 4 164.29 0 164.29 | - | 4 . 93 | ~ | Me651M1 -5 0 | SAIR OF RETURN A | 4. 128 e | |
| 15.24 1 1 2 1 1 2 1 1 2 1 2 2 2 3 4 1 3 1 4 2 1 1 2 2 2 3 1 3 1 4 2 2 3 2 3 3 4 4 2 3 3 3 4 4 2 3 3 3 4 4 2 3 3 3 4 3 3 4 4 2 3 3 3 3 | | 1.45 | - | A 3- ANSIG | # 17 Miles 2018 | 1842.54 | |
| 157.28 6 6 5-1 (EGSAR) WE PACEEN W 439.06 1 (25.28) WE PACEEN WE PACEEN W 439.06 1 (25.28) W | | 3 3 | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | SECOND IN IN. | 4 50 5345 | |
| 273.48 | | 3 | • | NO CLUBAL MANAGEMENT OF THE PARTY OF THE PAR | | × 50. | |
| 10.00 1.00 | The state of the s | ļ | | P - | ALL PRESCUE VAL. | 623.88 | |
| 15.00 15.0 | SEAT THE PURPLY BY CLAIR PERSON . | ₹ .6% | • | 901000000000000000000000000000000000000 | 90732402444444444 | 99779797799 | |
| 18.28 19.20 1. SECOND 1.8.18 1. SECOND | 5.4.c (MHASERN) R2 (15 (ERB) + | | • | | | | |
| 18.28 15.28 15.28 15.28 15.28 15.28 15.28 15.28 15.28 15.28 15.28 16.18 16.19 16.19 16.19 16.19 16.19 16.19 16.19 | (Fe unit = 14 to 1 | | | 6- NAKGER D | F PUSHIVE 1. A. R. = | - | |
| 15.58
15.58
15.58
15.58
15.58
1.55
1.58
1.58 | 11 CASSIGLIUM ACTUB (MUNICO) = | 3 .91 | | 7- IF ME > | 1, SECOND 1. R. R | 6.0% | |
| 15.04
 15.04
 15.04
 2.05
 2.05 | 2 Sec. 2016 Street of cities after a | 3 | | | | | |
| 15.48 15.48 4.19 4.20 15.48 15.49 4.20 15.48 15.49 4.20 15.4 | . 3 EURIDIAN CLASSING BELIEFE . | 48.51 | | | | | |
| 15.45 1 2.45 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.23 1.5 4.19 4.19 4.23 1.5 4.15 4.15 4.15 4.15 4.15 4.15 4.15 | A PLANTAGE CAPPAGE BY BELLINE | 25.55 | | | | | |
| - 5000.00
- 0.55
- 0.00
- 0.00 | 6.4 YEHR OF SAE | 15.68 | | | | | |
| 61.55 61.38 61.19 61.29 | S FEBRUAR PARTE IN S. 1.1 = | # 3 | | | | | |
| 1.68 (a.17 (a.18 a.19 a.24) | S ALLEN ALLEN HER HER MILE . | ¥8
••• | | | | | |
| 6.15 8.17 8.19 8.20
L.86 | IF JETTUR 3 JR 5 15 YES 111, ENTER FEE - | 7 | | | | | |
| (a) (a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | The Carlotte of Street, and the Carlotte | | | | | | |
| | Manual of the standing of the 1 (31). (5) | | | | | ₹. | 8 |
| 4 | | 80 - | | | | 2 | ; |
| | ייין דיין וייין וייין ארייטו | = : | | | | | |

plant suit den vinit in terrai in terrais financiais débalan in terrais filorés an Arbashas de aguises en

| | co-4 | N | ÷ | • | | *** | ,-• | • | ın | п | | m | ~ |
|----------------|--|-----------------|--|-----------------|-------------------|---------------------|---|--------------------------|----------------|------------------------------|--------------------------|--------------------|------------------|
| • | index or a contrast. The Park Contrast of | 6 6 | 2 3
2 2 | 33 | 1982.59 | 58.83
58.73 | 100 100 100 100 100 100 100 100 100 100 | 28 P. C. | 11.13
17.53 | 1378.52
1378.52
181.86 | 28.788. | 14c6. 33
63. cd | र
इ.स. |
| | 2. St. 28. St. | 3. 63 | 3.73 | 23.3 | 3/4.68 | 167.91 | 276.93 | . #
#
#
1 | 162.53 | 1.49.87 | 311.52 | 2: | * |
| | Simple of the Control | 8.8
\$9.6 !! | 6. 36. 36. 36. 36. 36. 36. 36. 36. 36. 3 | 8. 8.
85.611 | 91789-
91789- | 37.55
8.8 | 61.23.16
81.88 | 65.555
65.55
65.55 | 573.16
3.30 | 31.05 | -323, 16
8, 23 | 91.00g | 병원 |
| | क में एकी में उस्सी | 373.84 | -156.04 | 113.63 | -123.67 | 37.45 | :78.83 | 81.415 | 24.fcs | 3.6.2 | 411.36 | 4/b. 33 | 1.2.1 |
| į | ## 제도 이 기계
#도 15 이 기계 | 23 | 2.2 | 23 | 34.72 | # 18
17 18
18 | .5. 3:
5. 7.63 | 3.65
36.36 | 88.51
88.51 | 8 X | .3.58
57.58 | -13.% | 55 (E)
51 (S) |
| A - 33 | 167 SHEE HINGS GO. | 23 | 33 | 3 2 | -1.56.83
-0.84 | -75.35
-88.45 | 78.37 | 27.16 | 35.66 | -13.86 | र के श
चं चं | 9.3 | 33 |
| | न्हें देश मित्र साम्म हिंदीक | .179.64 | 196.2 | 23.91 | -522.58 | | .E5.65 | 363.61 | 23.55.2 | 281.27 | :
: 34
: 38
: : | 338.55 | 12. d) |
| - 1 | CARTON THE SECTION OF | e.
 | | 79.4 | 28t. 17 | 133.63 | 36.22 | .d.
{8.d. | 9 | 1.63 | - 101.84 | -138.39 | 67.58 |
| •
• | J. B. nower, Count Section | 2 | \$ | 3 | 576. 32 | -1825.67 | -1976.95 | -11.58.64 | -1187.34 | -1246.78 | -1389.64 | -1374.43 | 16-3.21 |
| | * # Tebunda Oktal FLOR 1788 HELSENSIA | 3 | 2. | 3 | -166.47 | -143.95 | 69. Kg | 27.18 | 16.58 | 33 | %: % | 124.47 | 1K. 15 |
| • | 10-a, autilities si Joan Pilân | ð. 84 | s.2 | 3. | -1143.29 | -11.5.62 | -1146.27 | 1:57.38 | :174.75 | -1184.59 | -1216. 78 | -12%.4: | -:26:.07 |

1000 EN

ř

| The state of the s | . Chira | ų | | • | | F | 5.4.3
3.4.3 | | FR S | 4.2.3 | 3. 843 | F | |
|--|---------|------------|------------------|--------------|-------------------------|---------------------------------------|----------------|------------------|-------------------|-----------------------|---------------|---------------------|----------------|
| | • | | | :
: : | !
!
! | * * * * * * * * * * * * * * * * * * * | | | | | | | |
| And office and | | ó | 15.50
17.15u. | Zei /. 41 | | | | | | | | | |
| The second secon | | | | :4:4. PM | | | | | | | | | |
| A CALL THE STATE OF THE STATE O | | 73.34 | 375. 34 | 3 7 | | | | | | | | | |
| | | . | 19.3.54 | 19779 | | | | | | | | | |
| ANTHALIST NATABI | | 3, | 55.32 | 397.63 | | | | | | | | | |
| Table over 17 to 2 of the real | | 373.34 | | £2.5.33 | | | | | | | | | |
| | | | | | | | | | | | | | |
| 1.1 11-2 | | 3. | S. 20 | Z | 1942.59 | 3 | 3. 3. | Ä | 1, 6, 17 | 33.55 | 31.35 | 72 | 4.0 |
| 11.2 Person 16. 18. 18. | | | ! | : | 2 | 2 | 2 | 8 | b. 24 | 2 | 9.59 | 4.23 | 3 |
| 1.3 0 F + 10 K 1 | | | | | 2. | 7. | 2.4 | 2. | 2.0 | 6.23 | R .* | 2.5 | P. 79 |
| the Gee of Property | | 3 | 3. | 2 | 75 | 8.4 | 2 | 2.4 | 6. 24 | 3. | 3. | 5 . 23 | 3 |
| 1.5 FF442.13E 2 | | | | | 2 | \$ | 7. | R ~ | 7.0 | ₽. 39 | 2 | 8. S | N |
| September 1980 | | 3 | 2 | 2 | 1842.52 | 3.15 | ac. 6411 | 1.0E.82 | 1-1-1-11 | 25.651 | 387. 3 | . €639 | 15.4
4. 6.3 |
| 2.4 OF SHI DAR ENEWAS | | | | | | | | | | | | | |
| | | | | | -45.89 | 43.18 | 56.13 | 33.12 | 29
31 | 12.50 | -1.43 | 15.45 | \$17.34 |
| A STREET OF BUILDING | | | | | -17.01 | 17.06 | 18.0 | -13.63 | 14.67 | -21.71 | 22.73 | 51 | |
| | | | | | 3 | 2 | 7. | 2. | 6.36 | 2.7 | ₹. | 6.63 | 3.62 |
| | | | | | 2 | 2 | 2 | 7 | 2.2 | 2 | 2. | 3 | 7.7 |
| 6.5. Spec 25.5 | | | | | 3 | 2. | 2 | 2 | 2 | 2 | 8.7 | ₹
• | 2.0 |
| C. b. 186.4.5.4.1 | | | | | F 33 | 4.37 | : | -1. 9 . | =: | -1.:0 | 7. 1 | 3 3
: | 1.37 |
| 第二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十 | | | | | ₹ : | 7 : | ₹ : | ₹ :
~ · | 2 : | Z : | 2: | 3 :
~ · | 3 : |
| データ 10 mm 1 | | | | | 2 : | 3 | 2 : | 2 : | 2 : | 2 : | 2 : | 2: | 2 : |
| A SAME TO LEAVE AND A SAME OF | | 3 | 7 | 7 | 3 3 | 2 ; | ₹ | 3 3 | 8 3
7 5 | 3 4 | 2 . | 3 T | 2 1 |
| 3 | | | 2 | | i i | - | ? | 3 | | ; | ; | | 2 |
| Selections in the selection of the selec | | 8 | 3 | : | 378 108 | 14,7,01 | 1078.39 | 1 K. S | 1185.53 | 1243.87 | 23.11.52 | 1377.10 | 1445.35 |
| A, B URBIT TELM TO UMON F UB. | | | | | | | | | | | | | |
| A. I. De of A. Filters, A Feb. | | * | 18c7.36 | 10.794 | * | | | | | | | | |
| 4.1.1 CMF-1 15 LEF | | 8 | 187. | # 7 7 | 3 | | | | | | | | |
| 表() (表) (表) (表) () () | | 2 : | 2 | 7 | T. | | | | | | | | |
| 5 to 1 to | | 3 | d | 749.43 | 2 | | | | | | | | |
| 17 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18 | | 3 | 21 594 | 0,000 | Z | | | | | | | | |
| 4,5 (KE) (7.5 pM; 3) (4.6 pM; 5) | | 3 : | 3 : | 7
7 | 1 | | | | | | | | |
| | | 8 2 | 2 : | 2 | 2 : | | | | | | | | |
| | | 1 7 | 2 7 | 2 2 | 8 1 | | | | | | | | |
| できた。 東京教育 大学学 (日本) | | | 2 4 | 1 | 2 2 | | | | | | | | |
| 4.3.2.4476.34 | | 2 | 3 | ₹ ₹ | 7 | | | | | | | | |
| 4.3.2 INCASE | | 3 | 2 | 3 | 2 | | | | | | | | |
| 4.3.3 EP.NED 24-44.2 | | 2 | 2 | 16. 63 | ₹ • | | | | | | | | |
| ALM BEST OF CONTRACT FUNDS | | | | | (1) F.2(3) | | | | | | | | |
| · 100 100 100 100 100 100 100 100 100 10 | | | | | 623.43 | 6245.31 | -£157. 84 | £7.73 | 5544.57 | -5817.3 | -5673.28 | 25.61.55
5.61.55 | 5. 3. £ £ |
| 4,4 2 Sept 24-51.8 | | | | | 91 94 | -36A, 16 | 4 . 16 | - 35 . 16 | 9.13 | 4 1 . ₹ | 91. T\$ | 34. 16 | 91 'RS- |
| 25.1.20 FR (4.15.1) | | | | | -76.12 | -68.≥7 | 50.06 | -112.72 | -121.31 | -147.93 | 162.64 | -183.78 | 19.18 |
| | | | | | 15 25. 15 | -811.93 | \$. ₹ | 787. 45 | 112.73 | 2.4 | -127.52 | 715.36 | £. 13 |
| | | | | | | | , | | ; | | | | |

| : |
|------|
| |
| - 7 |
| - |
| 1 |
| |
| 7 |
| |
| |
| |
| - |
| 7. |
| |
| : |
| • |
| |
| |
| • |
| : |
| • |
| |
| |
| |
| 17.3 |
| - 4 |
| ,7 |
| |
| .' |
| |
| .* |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| `. |
| |
| |
| |
| |
| |
| |
| |

| | 3 . 68 | d. 24 | 3 | . A. 16 | ¥: 11 | 900 | 30.00 | 2 | 2 | q: , , , | 9 | 9 |
|--|---------------|----------|--------|-------------------|------------------|------------|---------------|-----------------|--------------|------------------------------|----------------|--|
| | \$7.5.8¢ | 5 | 116.23 | -11.5.61
53.43 | 70 73
76 70 | 2 X
4 4 | 2 3
3 5 | 6 th | 23 | 8.3 | 8 Q
2 Z | 8 S
2 d |
| | 37.1.24 | 136.3 | 113.3 | 942.18 | 9.69 | 2.0 | 5.0 | 9.69 | 8 2.5 | 2 | ₹ ~ | b c |
| man and the first term of the second | 379.24 | 60.24 | 2.5° | -753.67 | 24.7.4 | 176.83 | F. 1707 | -31.42 | 13G. 28 | ¥ ::: | £. 3. | ₽.
** |
| A control of the second of the | 171.34 | | 118.23 | 94č. 18 | 8.48 | \$.6 | 8.8 | 4.3 | 8.3 | 8: | 8.8 | 2 |
| Control to the William | b. 23 | ê. č3 | 4. C | 78.12 | 53.31 | 35.75 | 112, 72 | 127.37 | 143.53 | .e.c. 84 | n | 19:3 |
| からない かんしょうかい かんしゅう かんしょう かんしゅう しゅうしゅう しゅうしゅう しゅうしゅう しゅうしゅう | ž | ð. ; ð | 7 | 2 :
3 : | 3 7.7 | 20 ° | 3 3 | 3 ?
3 ? | 8.3 | 3 :
2 : | 2
3
3 | 3: |
| (1) 1 (1) (1) (1) (1) (1) (1) (1) (1) (1 | • | | | 2 7 | 3 4
5 1 | 8 4 | 2 7
5 7 | 200 | 97. | 37 | 3.7
7.7 | 3.5 |
| The DEF-SCHOOL INCAS | | | | 659.67 | 8 7 48 J | | 8 (8 | 2 | 7 | है ज
इ.स.
इ.स.
इ.स. | 9. 7 | 3 3 |
| 7.7 Neverthalist State | 10 011 | • | | 3 (| 3 | 38 | 2.5 | 4.8 | 2 | 72 : | 28 : | 3. |
| T LE TOTAL TE | 17.04 | 136.24 | 20.51 | (3. b) | | 4 | ģ | 134.63 | -170.4d | 23.0 | | W. Y. 1 |
| A confidence of the confidence | | | | 7 3 53.62 | \$6.53.84 | 5742,54 | 18.48.3 | 4745.55 | 4361.14 | 15'3.73 | 24
16
17 | if the |
| 4.2 44.13 (Bib) 5.4.3 | | | | 7602.52 | 400.74 | 71.78.37 | 6937.23 | \$.
₹.
1. | 6423.85 | 62:1.97 | 55.28.14 | £ |
| The state of the s | | | | 2 · | 9. S | 3: | 3: | ₹; | 3.5 | 2 :
4 : | ₹. | 4.65 |
| | | | | \$ 7
• • | 3 - | 2 4 | | 3 A | 3 7 | 3 a | 3,7 | 3 ?
3 |
| 100 100 100 100 100 100 100 100 100 100 | | | | 3 S | 3 7 | B 2 | 7 A | 2 3 | 2 7 | 2 3 | | 3 4 |
| 3.7 EXCESS BEFOREHILDA | | | | 3 | 28 | 3 | 3 | 2 | 3 | 2 | 2 | 3 |
| 5.8 LPG Term 04(N (LLSS) | | | | 9.6 | 28 | 2: | 2: | 2 | 28 | 2 3 3 | ₹ . | 5. |
| | | | | 3 | | 2 | Z. | 5 | 3 | 2 | 3 | . |
| 9.8 minks 170.00 | 26.0 | 3. | 3. | -634.84 | -478.36 | -317.96 | -193.84 | -4.3. œ́ | 118.42 | 181.53 | 378. x | 471.63 |
| COLOR DESCRIPTIONS OF THE COLORS | 3 | 3 | 7 | 72 20 | 70 00 | 3 | ,, | 9 | G V | 9 | 9 | 3 |
| | 2 9 | 3 4 | 3 1 | 8 8 | X X | F G1 | 3 f | | 4 X | 6. C. | X C | 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5 |
| 6.3 Tufm 14 Lat. | 8 | 3 | 3 | 136. S. | 23.23 | 164.59 | . E. | X | . 75. 24. | : 35
: 35
: 35 | 13.53 | 200 |
| ILS MINIKM THE GALLERS LAST | | | | | | | | | | | | |
| स.। १६-५:सिरिक जान्ड | | | | | | | | | | | | |
| 11.1.1.1 (E. 3 & 11.01%) | | | | 741.67 | 65.58
28.58 | 237.54 | 469.53 | 441.45 | 133.41 | 323.41 | 333.41 | 33.41 |
| THE RESIDENCE OF THE PROPERTY | | | | S . | 33) | 67.15 | 24 ;
33 1 | 3. s
5. s | 3.5 | 41.65 | 41.65 | 41.65 |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | 3 | 2 2 | 2 2 | 3 a | 2 9 | 7 1 | 2 4 | 7 7 | 2 3 |
| 11.1.5 36-3 35 456 12 | | | | 3 | - | 2 | 7 | 3 | 26 | 2 | 2 | 3 |
| 11,11,6 TOTAL ALTO ACTOR | | | | 15.63 | 67.38 | 616.54 | 28.50 | 459.45 | 182.41 | 382.41 | 14.000 | 382.41 |
| H.2 Level all the Sills | | | | | | | | | | | | |
| 11. 2. Freed Minimized | | | | = 1 | 176.11 | 176.11 | 17.17 | 178.11 | 179.11 | = (2
= (3 | 176.11 | 1.7.
1.7. |
| 10 C T T T T T T T T T T T T T T T T T T | | | | à à | à 2
8 ° | 4 4 | 2 A | 3 | 70 X | 7 7
9 9 | à 2
g 4 | ja 1 |
| 1977年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の | | | | 1 0 | B 4 | 2 | B A | 2 1 | 2 2 | Z A | 2 a | 98 - 1
C: 1 |
| 11.25 Serve 198 note 42 | | | | 1 3 | B 4 | 1 1 | 13 | B 28 | 1 1 | 3 7 | 8 2 | 2 7 |
| 11.5.5 10.4 5.1. 30.4 | | | | 241.77 | 241.77 | 241.77 | 241.77 | 241.77 | 241.77 | 241.11 | 241.77 | 24.145 |
| 11.3 Eu.S. i term Tinft & | 3. | 3 | 3 | 698.83 | 45.81 | 374.17 | 236.72 | 218.54 | 13.2 | 143.64 | 149.64 | 14.64 |
| Harden Florence | 3 | ₹. | 3 | 2 | 3 | 3 | 2 | 2.0 | 3 | 7 | 2 | 2 |
| | | | • | | | | | | | | | |

A-35

The second of the second of the second of the second of the second of

D

| The state of the s | 6.16 | \$7.54
\$1.24 | 2 | 312, 13 | 7F 655 | 36 673 | 3 | | ; | ć | | |
|--|----------------|-------------------|---------|------------|-------------------|--|--------------|----------------|-------------------|---|------------------------|-------------------|
| (1) 利利公司 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) | 6.39 | 7: 2 | 2.2 | - 56.83 | 79.31 | -16.37 | 57.16 | 143 | 3 mg | 3 3 1 | હ ના
-
-
- | 3 ≈
3 3 |
| A 4 CA A 4 CA 4 | 1.7.34 | \$7.9F | -114.08 | \$ 75 | Æ1.3¥ | 365.45 | 163.61 | 22
71
71 | 25.13 | 23.05 | 41 | . 35 |
| CONT. WASHINGTON OF THE | | | | | | | | | | | | |
| # 750
100 | | | | | | | | | | | | |
| * * * * * * * * * * * * * * * * * * * | | | | 4 4 7 | • | | : | ; | | | | |
| | | | | 3 7 |] ; | 5.0 | 26.07 | • | ; | ** | 74
 | <u>ت</u>
د |
| the state of the s | | | | : A | 17. | 7 7 | 63.164 | | | 1.11. | • | 3
•• |
| Service Services | ₽.
~ | 6.0 | 3.38 | | 180
191
191 | 2 TH | 9.9 | 3,'c | * **; | 3 1 3 1 3 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 | (5 ° 12
+3 ° 7
7 | 2 12
** |
| Carrier and Carrier and Carrier | | | | | | | | | | | | |
| all stitutus | | | | 7 | | : | ; | ; | | | | |
| LINDER ON THE STATE OF THE STAT | | | | 8 2 | 8 7 | 2 : | 23 :
30 : | 6. i | 2 | e. 22 | 6.09 | PC :5 |
| 2.3 38 80063 | | | | 3 4 | 9 . | 3 7 | 3 ° | 9.19 | 73 .
⊸i · | જ .
જ | 8.49 | 2.5 |
| A Strike. | | | | 60 Z | 11 to 5 | 17 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | X 3 | 7 5 | 9 | (a) | | |
| 1 25 SH4 (35 | | | | 1 2 | 8 5 T | 2.5 | 5.0 | /9/11: | 41.54.14
41.14 | 74.47 | 23 | 6.4.4 |
| 36 | | | | 1 | 8 7 | : X: * | 20.7 | ₽ a
g | -37.27 | -33.13 | X : | 11:11 |
| 347 miles 147 miles | | | |
 | 8 % | 8 - A | | o. cc | 9. F | 6. dd | 3. ₹3 | ₹
4 |
| 2.3 Dires | | | | 3 7 | | S | 2 ; | Q (| 15.37 | 9 | 15.1 | ۲., |
| 2.9 miller age | | | | | 27.0 | \$. | 15.16 | | | -59.63 | :3:
:4: | * 1 |
| 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | | | | 2 5 | 2 3 | 2 | 2 | ~ | ?
~ | A. 6 | ≈~ | 3.5 |
| | | | | P | -103.00 | -616.31 | £ :7/4 | Q .; | 4.77 | -77d. 31 | 11년 | 53.63 |
| S. C History of Contracts | | | | | | | | | | | | |
| 3.1 (642, 547) | 2. | ž | 2. | -1942,58 | -1834.63 | 2 5414- | -1306 6- | 11 /2.1- | 69 6337 | 97 | : | |
| では、 できる はいまり のできる かんしゅう | 7.57 | 2 | 3 | 76.3 | 2 | 7 | 7 | 17:70 | 77.6 | 133/. 63 | 8 2 | 0.54.17 |
| 四年前五十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二 | 2. | 6.23 | 2.2 | 25 | 2 | 2.7 | 3 7 | 22.0 | 3 7 | 9 .
9 . | 33 :
 | 3 |
| · 一日 - 日日 | 2 | &
~ | 3 | 3 | . P | 2 | 2 | 2 7 | e (| 2 7 | 2 2 | P : |
| A. S. Golden, Physical editors, 72 | 9 . 23 | 5.79 | 4.43 | -1842.58 | -1634.03 | -1147.36 | -1286.32 | -1(57, 17 | 3000 | 20 Zer | 3 % | 9 |
| 第二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十 | 2.7 | 3 | 7 | 50 375 | | 200 | | | ; | : | ; | |
| | | | 3 | d
d | 10.50 | 16/6. 33 | 11.136.06 | -1187. 34 | 1245.7 | \$. (X) | -13-43 | -14-3.51 |
| | | | | | | | | | | | | |
| 1999) Herbird Arbida (Citil | | | | | | | | | | | | |
| LA TOTAL THE RESTANCE | 3 | . e | 2 | -166.47 | -189.95 | æ. 69- | -27.18 | 16.58 | S. II | %
% | 124, 47 | 552.15 |
| | | | | | | | | | | | : | ! |
| DDD CARCONING RALLS AND COLUMN | | | | | | | | | | | | |
| 新 (1) 東京 [1] (大河 · 東)(1) · 東] | 3 | 3 | | | | | | | | | | |
| | B. | ŝ | 2 | £ | ±
23
23 | -1146.27 | -1157.98 | -1178.75 | -1184.59 | -1216. 78 | -104.8 | 15.22.37 |
| | | | | | | | | | | | | |

APPENDIX B

COST DATA FOR CASH FLOW MODEL

APPENDIX B COST DATA FOR CASH FLOW MODEL

To support the cash flow analysis, a major data collection effort was completed to determine operational expenses. For ten Army installations, both non-appropriated fund and appropriated fund cost data for FY84 were collected for the eight building types considered. The specific installations and building types are listed below:

| Army | Inst | aliations | <u>Buil</u> | ding Types |
|------|------|-----------|-------------|------------------------|
| 1. | Fort | Belvoir | 1. | Officer's Club |
| 2. | Fort | Benning | 2. | NCO/EM Club |
| 3. | Fort | Bragg | 3. | Package Beverage Store |
| 4. | Fort | Jackson | 4. | Golf Club |
| 5. | Fort | Knox | 5. | Bowling Center |
| 6. | Fort | Lewis | 6. | Arts and Crafts |
| 7. | Fort | Meade | 7. | Youth Center |
| 8. | Fort | Ord | ٤. | Guest House |
| 9. | Fort | Sheridan | | |
| 10. | Fort | Stewart | | |

Before discussing the minor problems encountered in the data collection, it is appropriate to describe the intent of the data analysis. The operating expenses in the cash flow model are divided into eight distinct categories. The use of the cash flow model requires that reasonable estimates of these expenses be predicted with the data present before undertaking the development of one of the above building types. Therefore, regression analysis was completed using square feet of building area or income for each of the building types as the predictors of the particular expenses. For clarity, the eight operational expense categories follow:

Operational Expenses

- 1. Utilities
- 2. Repairs and Maintenance
- 3. Services
- 4. Payroll
- 5. Supplies
- 6. Insurance
- 7. Administrative
- 8. Other

Historic costs from NAF financial records were grouped into these eight categories using the relationships shown in Exhibit 1. APF costs were grouped into these categories by the installations in most cases—since no consistent accounting categories are used. Ideally, each regression file would contain the eight expense categories, income, and square feet as variables, and observations from all ten Army installations. However, in practice, only the Bowling Center regression file contained ten observations. The number of observations contained in each regression file is listed below.

Number of Obervations

- 1. Officer's Club 8
- 2. NCO Club 8
- 3. Package Beverage Store 8
- 4. Golf Club 9
- 5. Bowling Center 10
- 6. Arts and Crafts 9
- 7. Youth Center 9
- 8. Guest House 6

The major reason why most of the files have less than ten observations is that some of the installations in the sample do not have all eight building types or the data for all the types were not available. Additionally, some of

Exhibit 1

Attachment 1

| NAF
ACCOUNT
NUMBER | ACCOUNT NAME | CATEGORY |
|--------------------------|--------------------------------------|----------------|
| 626 | Supply Expense | Supplies |
| 627 | Laundry/Dry Cleaning Expense | Services |
| 628 | ICE Expense | Supplies |
| 629 | Utilities Expense | Utilities |
| 630 | Communications Expense | Administrative |
| 631 | Freight Expense | Supplies |
| 632 | Travel Expense | Administrative |
| 633 | Insurance Premium Expense | Insurance |
| 634 | Building/Content Insurance Expense | Insurance |
| 635 | Advertising Expense | Administrative |
| 636 | Taxes and License Expense | Administrative |
| 637 | Tort Claim Expense | Other |
| 638 | Audit Expense | Administrative |
| 639 | Cash Shortage Expense | Administrative |
| 640 | Late Payment Interest Expense | Administrative |
| 641 | Deposits Lost Expense | Administrative |
| 642 | Furniture and Equipment Expense | Supplies |
| 643 | Commercial Credit Card Expense | Administrative |
| 644 | General Entertainment Expense | Services |
| 645 | Special Event Entertainment Expense | Services |
| 646 | Renta! Expense | Services |
| 647 | Flowers and Decorations Expense | Services |
| 548 | Official Host/Representative Expense | Services |
| 649 | TWR, KWR, Linen and Uniforms Expense | Services |
| 650 | Bingo Prizes Expense | Other |
| 651 | Manager's Expense | Administrative |
| 652 | Promotions Expense | Administrative |
| 653 | Customer Rejected Goods Expense | Inventory |
| 654 | Merchandise S.B.O. Expense | Inventory |
| 655 | Warehouse S.B.O. Expense | Inventory |
| 656 | Inventory Shortage Expense | Inventory |
| 657 | Facility Maintenance/Repair Expense | Rep./Main. |
| 658 | Equipment Maintenance/Repair Expense | Rep./Main. |
| 659 | Vehicle Maintenance/Repair Expense | Rep./Main. |
| 660 | Training Expense | Administrative |
| 661 | Bad Debt Expense | Administrative |
| 652 | Discount Loss Expense | Administrative |
| 663 | Bank Service Charge | Administrative |
| 664 | Vehicle Operating Expense | Administrative |
| 670 | Sports Activities | Other |

Exhibit 1 Attachment 2

| NAF
ACCOUNT
NUMBER | ACCOUNT NAME | CATEGORY |
|--------------------------|---------------------------------------|----------------|
| 671 | Awards and Trophies Expense | Other |
| 672 | Sports Officials Expense | Other |
| 674 | Scouting Expense | Other |
| 677 | Program and Brochure Expense | Services |
| 682 | Civilian Personnel Service Expense | Administrative |
| 683 | Administrative Support Branch Expense | Administrative |
| 684 | Central Procurement Office Expense | Administrative |
| 685 | Central Accounting Office Expense | Administrative |
| 686 | Contractual Services Expense | Services |
| 689 | Central Payroll Office Expense | Administrative |
| 690 | Data Processing Expense | Administrative |
| 699 | Miscellaneous Operating Expense | Administrative |

D

the regression files contained incomplete data for the square feet variable; that is, one or two of the observations did not have a square feet value. This problem is minor, but it is preferable to have as many observations as possible for the regression analysis.

A few modifications of the data are worth noting. Three of the installations in the sample had only aggregate appropriated fund cost data. Instead of ignoring this data in the analysis, the aggregate cost values were broken down into the expense categories by using the expense percentage breakdown from another installation that had disaggregated appropriated fund data. Although this could lead to somewhat distorted regression results, it was considered an appropriate action, especially since that for most building types the appropriated fund cost is substantially less than the non-appropriated fund cost. Another modification that needs to be outlined is the aggregating of the cost data if two or more buildings of one building type were present on a particular installation. In the analysis, each installation is represented by only one observation of a particular building type, even if that installation has two Bowling Centers, for example.

In general, the regression analysis was not hampered by data problems. First, it is important to note that the analysis was performed with the ordinary least squares technique of regression. As a first attempt, regression analysis was used to try to develop estimating equations for the expenses using square feet as the only independent variable or predictor. Any observations in which there was incomplete data for the dependent or independent variable were dropped. Basically this full sample provided poor predictor equations. Otherwise, outlier observations (one in which the predicted value of the dependent variable is far from the observed value) were deleted from the sample and another regression was run; this process was generally not successful. Most of the time, square feet alone was found to be a poor

^{*}For more information on regression analysis see: Pindyck, Robert S. and Daniel L. Rubinfeld, Econometric Models and Economic Forecasts, McGraw-Hill, 1976, Chapters 1-3.

predictor of the expense elements. In other words, often there was little or no relationship between the expense elements and square feet.

The same procedure was utilized using income generated by the building type as the independent variable. After this analysis, some expense elements were still without reliable predictor equations. Lastly, the remaining expense elements were analyzed using both income and square feet as independent variables in the regression. However, these equations were rejected due to statistically poor coefficients (t-score < |2|) and intuitively unappealing coefficient signs. At the conclusion of the analysis, most expense elements for each building type had a reliable predictor equation. For those remaining expense elements without a predictor equation, an average expense cost per square foot was developed using the data available.

After the data analysis was complete, all of the regression equations were reviewed. Since the sample size was often reduced from the original sample, some of the equations were found to be limited in their predictive ability. In other words, they were suitable for the sample used in the regression analysis, but for a potential building which has a small or large square feet and/or income value their usefulness diminished. Basically, for some potential "abnormal" buildings (i.e., square feet and/or income is unusually small or large) the equation would predict negative expenses. Opeviously this is a distorted prediction. Therefore, each building type contains a range of values for square feet and income that will provide reliable estimates of the operating expenses.

It is important to mention that the analysis conducted on the data could be expanded. Presently, the only independent variables used to estimate operating expenses are square feet and income. Other independent variables could be used that may generate better predictor equations. For example, a few potential predictors that seem reasonable are building age, base population, geographic area (mean temperature), and capacity measures such as the number of beds in a Guest House or the number of lanes in a Bowling Center.

The equations and cost per square foot values, one for each expense category for each building type, are presented in Exhibit 2. To review, a user of the cash flow model will need only to know the square feet and income generated by a particular building type to obtain expense estimates within the specified ranges of square feet and income.

Exhibit 2

PREDICTOR EQUATIONS

OFFICER'S CLUB

- 1. Utilities/SOFT = .76
- 2. Repairs and Maintenance/SOFT = .72
- 3. Services = -106492.34 +2.1906 INCOME Sample Size = 8 R² = .9042
- 4. Payrol1 = 55061.25 + .6843 INCOME Sample Size = 6 R² = .9757
- 5. Supplies = -28089.93 + 20808 INCOME Sample Size = 7 R² = .9222
- 6. Insurance/SOFT = .08
- 7. Administrative/SQFT = 2.92
- 8. 0 ther/SQFT = .67

NCO CLUB

- 1. Utilities/SQFT = 1.33
- 2. Repairs and Maintenance = -12881.01 + .0272 INCOME Sample Size = $6 R^2 = .7816$
- 3. Services = 49233.92 + .1028 INCOME Sample Size = 7 R² = .8527
- 4. Payroll = 316947.75 + .3347 INCOME Sample Size = 6 R² = .9523
- 5. Supplies = 12968.10 + .0321 INCOME Sample Size = $6 R^2 = .9161$
- 6. Insurance = -78.36 + .0030 INCOME Sample Size = $5 R^2 = .8045$
- 7. Administrative/SQFT = 2.85
- 8. Other/SQFT = 7.73

PACKAGE BEVERAGE STORE

- 1. Utilities/SOFT = .77
- 2. Repairs and Maintenance = -8491.75 + .0212 INCOME Sample Size = $6 R^2 = .9159$
- 3. Services/SOFT = .35
- 4. Payroll = 100895.27 + .0866 INCOME Sample Size = 5 R² = .9730
- 5. Supplies = -3355.15 + .9128 INCOME Sample Size = 6 R² = .9591
- 6. Insurance = 567.05 + .0959 SQFT Sample Size = 5 R² = .8690
- 7. Administrative/SQFT = 1.67
- 8. 0 ther/SQFT = .10

GOLF CLUB

- 1. Utilities/SQFT = .86
- 2. Repairs and Maintenance 2 -6150.86 + .0747 INCOME Sample Size = 6 R² = .7755
- 3. Services/SQFT = 1.07
- 4. Payroll = 5687.39 + .6452 INCOME Sample Size = 7 R² = .8573
- 5. Supplies/SQFT = 2.51
- 6. Insurance/SQFT = .05
- 7. Administrative/SOFT = .70
- 8. Other/SQFT = 2.79

BOWLING CENTER

- 1. Utilities/SOFT = .99
- 2. Repairs and Maintenance = 1340.44 + .0235 INCOME Sample Size = $7 R^2 = .7968$
- 3. Services = 2197.19 .0020 INCOME Sample Size = 5 R² = .8833
- 4. Fayroll = 38724.35 + .6975 INCOME Sample Size = $9 R^2 = .9343$
- 5. Supplies/SQFT = .63
- 6. Insurance/SQFT = .02
- 7. Administrative/SOFT = .04
- 8. Other/SOFT = .96

ARTS AND CRAFTS

- 1. Utilities/SOFT = 1.31
- 2. Repairs and Maintenance = 1910.69 + .0333 INCOME Sample Size = $6 \cdot R^2 = .7711$
- 3. Services/SQFT = .07
- 4. Payroll = 162429.65 + 2.5282 INCOME Sample Size = $7 R^2 = .9767$
- 5. Supplies/SOFT = 1.05
- 6. Insurance/SOFT = .004
- 7. Administrative/SQFT = .01
- 8. Other/SQFT = 1.00

YOUTH CENTER

- 1. Utilities = 12120.66 + 27089 SOFT Sample Size = $5 R^2 = .8778$
- 2. Repairs and Maintenance = -1047.22 + .0919 INCOME Sample Size = 7 + .0919 Repairs and Maintenance = -1047.22 + .0919 INCOME
- 3. Services/SOFT = .73
- 4. Payroll = -10297.86 + 1.8345 INCOME Sample Size = $8 R^2 = .8322$
- 5. Supplies = 12074.99 + .0960 INCOME Sample Size = $6 R^2 = .8021$
- 6. Insurance/SOFT = .003 *
- 7. Administrative/SQFT = .07
- 8. $0 \frac{\text{ther}}{\text{SQFT}} = 1.08$

GUEST HOUSE

- 1. Utilities/SQFT = 1.66
- 2. Repairs and Maintenance = 6013.17 + .8396 SQFT Sample Size = $4 R^2 = .8130$
- 3. Services = -14220.44 + 21314 I NCOME Sample Size = $5 R^2 = .8782$
- 4. Payroll = 27540.70 + .4800 INCOME Sample Size = 6 R² = .9647
- 5. Supplies = -897.86 + .3961 SOFT Sample Size = 4 R² = .7995
- 6. Insurance = 2384.90 .0153 SQFT Sample Size = 4 R² = .8609
- 7. Administrative = $-14600_286 + .0739$ INCOME Sample Size = $5 R^2 = .9643$
- 8. Other/SQFT = .003

RANGES

Officer's Club

[600,000] INCOME 2,500,000 4,000 SQFT 100,000

NCO Club

[500,000] INCOME 3,000,000 4,000 SQFT 150,000

Package Beverage Store

[425,000] INCOME 2,500,000 500 SQFT 20,000

Golf Club

[100,000] INCOME 1,000,000 5,000 SQFT 20,000

Bowling Center

100,000 INCOME [1,050,000] 5,000 SQFT 100,000

Arts & Crafts

5,000 INCOME 300,000 2,000 SQFT 150,000

)

Youth Center

[12,000] INCOME 150,000 5,000 SQFT 75,000

Guest House

[200,000] INCOME 1,000,000 [2,500] SQFT [155,000]

Brackets [] denote a necessary limit, since if not followed, the predicted expense could be negative. All other range limits are arbitrary, though coincide with the data.



J-412

May 29, 1985

Captain John Cokely HQ DA (DAAG-NFF-M) Room 1200 - Hoffman 1 2461 Eisenhower Avenue Alexandria, Virginia 22331

Dear Captain Cokely:

Enclosed are five bound copies and one unbound copy of the NAF-MC Alternative Financing Strategies report dealing with Germany. As we mentioned, the level of detail presented in the report is limited due to the constraints that were placed on the study plan. However, the study does indicate three critical items:

- 1) The third party financing strategies developed by Delta for CONUS use are applicable to Germany.
- 2) The application of ABG-75 which regulates design and construction practices for USA facilities needs to be determined. If ABG-75 is applicable, significant time and dollar impacts to the construction could result.
- 3) The potential loss of tax exempt status of NAFIs under the proposed financing strategies should be carefully considered prior to initiating the projects.

We feel strongly that some in-country research in conjunction with USAEUR is mandatory prior to implementing the strategies. We would look forward to working with USA-CFSC and/or USAEUR toward that end as needs dictate. If you have any questions or comments please call.

Once again, we have enjoyed working with you on this project and look forward to the continuation of a mutually productive relationship in the future.

Sincerely.

DELTA RESEARCH CORRORATION

Richard R. Rast

Vice President, JWN Division

RRR/sf enclosure

TABLE OF CONTENTS

| | | | | | Page | |
|---------|----|--------------------------------|---------|--|------|--|
| SECTION | 1. | INTRODUCTION | | | | |
| | | 1.1 Purpose of Study | | | | |
| | | 1.2 | Activit | ies and Actions Taken | 1 | |
| | | | 1.2.1 | NATO Infrastructure Eligibility and Funding | 1 | |
| | | | 1.2.2 | AAFES Experience with Financing by Others in Germany | 1 | |
| | | | 1.2.3 | U.S. Army Leased Housing in Germany | 2 | |
| | | | 1.2.4 | Requests for Expression of Interest | 2 | |
| SECTION | 2. | FINANCING STRATEGIES | | | | |
| | | 2.1 | Financi | ng Strategies | 2 | |
| | | 2.2 | Cost Co | onsiderations | 2 | |
| | | 2.3 | Market | Analysis | 3 | |
| SECTION | 3. | PRIVATE SECTOR MARKET ANALYSIS | | | | |
| | | 3.1 | Introdu | uction | 3 | |
| | | 3.2 | Invest | ment Financing | 3 | |
| | | 3.3 | Bowling | g Centers | 4 | |
| | | 3.4 | Constru | action Firms | 4 | |
| | | 3.5 | | ng Options | | |
| | | 3.6 | Gesign | Considerations | 4 | |
| SECTION | 4. | SPECIAL LEGAL/TAX ISSUES | | | | |
| | | 4.1 | General | | 5 | |
| | | | 4.1.1 | Background | 5 | |
| | | | 4.1.2 | Supplemental Agreement to the SOFA | 5 | |
| | | | 4.1.3 | NAFI Proposed Facilities Under ABG-75 | 5 | |
| | | | 4.1.4 | Special Coordination | 6 | |
| | | 4.2 | Tax Exe | empt Status | 6 | |

TABLE OF CONTENTS (Continued)

| | | | | Page | | |
|------------|--------------|-----------------|---------------------------------------|------|--|--|
| SECTION 5. | FIND | INGS AN | D RECOMMENDATIONS | 6 | | |
| | 5.1 Findings | | | | | |
| | 5.2 | Recommendations | | | | |
| | | 5.2.1 | Resolution of Applicability of ABG-75 | 5 | | |
| | | 5.2.2 | Facilities Common to Germany | 7 | | |
| | | 5.2.3 | Facilities Not Common to Germany | 7 | | |
| APPENDIX A | TYPI | CAL LET | TTERS OF INTEREST | 8 | | |

1. Introduction

1.1 Purpose of Study

This Study was developed under a subcontract to J. W. Morris, Ltd., from Delta Research Corp as a supplement to Delta's Final Report, entitled Financing Monappropriated Fund, Major Construction, dated March 28, 1985. This study concerns the financing of Nonappropriated Fund (NAF) major construction in Germany, complementing Delta's study which concerns NAF facilities within the United States.

1.2 Activities and Actions Taken

The initial course of action included a trip to Germany to visit and have discussions with personnel of the German construction and financing communities; U.S. Army Corps of Engineers, Europe; U.S. Army Europe Headquarters; and, the headquarters of Army and Air Force Exchange Service. Telephonic and mail communications were substituted when the trip was cancelled.

1.2.1. NATO Infrastructure Eligibility and Funding

NATO eligibility and funding were discussed with Major Kevin Mahoney of Department of Army at the Pentagon. Major Mahoney is a member of the Army group responsible for selecting U.S. Army projects for inclusion in NATO annual programming. NATO will not consider funding of morale and welfare facilities for any member country.

1.2.2. <u>Army and Air Force Exchange Service Experience with Financing by Others in Germany</u>

AAFES experience was discussed with Mr. Russell Lown of AAFES in Dallas, Texas. AAFES has no experience with contractor financing of their facilities. Funding of replacement autobahn service stations in Germany is provided by the Federal Republic of Germany (FRG) when stations are required to be relocated due to autobahn exit relocations. Otherwise, AAFES requirements in Germany are funded by Congress

1.2.3. U.S. Army Leased Housing in Germany

The U.S. Army reimburses the Federal Republic of Germany which leases housing from German contractors built to U.S. Army requirements. The U.S. Army does not lease directly from German contractors according to Mr. Bill Lowe at Directorate of Real Estate, OCE.

1.2.4. Requests for Expression of Interest

Letters explaining the purpose of this study and requesting expressions of interest in participation of financing NAF major construction in Germany were mailed to the Deutsche Bank, Construction Contractors, A U.S. bowling center company and the Chambers of Industry and Commerce in many areas of Germany hosting U.S. Army Installations. A total of 26 letters were mailed on March 22, 1985 requesting response by April 15, 1985.

2. Financing Strategies

2.1. Financing Strategies

The strategy ground rules, financing options and facility types used in Delta's study were slightly modified to eliminate topics not relevent to Germany and mailed as an enclosure to the letters. A copy of a typical letter and enclosure is at Appendix A.

2.2. Cost Considerations

Cost of constructing NAF facilities in Germany is affected by external economic factors similar to construction in the United States, i.e., inflation, competition among constructors etcetera. There is, however, an additional factor in Germany which does not apply in the U.S., i.e., the foreign currency fluctuation which occurs on a daily basis and has varied as much as 3% in 24 hours. In late April 1985, the Mark dropped from 3.10 to 3.0 to the dollar in a single day. Currency fluctuation could be a significant factor when financing of facilities is accomplished in periodic payments such as mortgage financing.

2.3. Customer Market Analysis

The market in Germany is significantly different from that in the U.S. Approximately twenty-five percent of the U.S. Army is stationed in Germany, about 200,000 soldiers, plus dependents. Added to these are several thousand U.S. Army civilian employees and their dependents. The vast majority of these persons speak little or no German. Therefore, they are more of a captive user to their MWR facilities then their counterparts in the U.S. In general, many of the MWR type facilities are not readily available to them in the private sector in Germany.

3. Private Sector Market Analysis

3.1. Introduction

This market analysis was intended to identify private sector interest in the financing, construction, and possible operation of MWR facilities in Germany. The following objectives were defined:

- a. To determine applicability to Germany of the NAF financing strategies as defined in Delta's Final Report.
 - b. To define the types of investors which are more likely to submit proposals.
- c. To solicit input from potential investors/operators concerning their interest in participating in the proposed program.

A number of various potential private sector parties responded to our letter, including construction contractors and investment bankers. Details of the responses are described in the following paragraphs.

3.2. Investment Financing

Attached is a letter from Deutche Bank which is typical of the German banking community. It states that the strategies described in our letter are generally feasible under German financing and tax regulations. Under the German "universal"

banking principle" it is possible for a German bank to provide traditional permanent mortgages as well as bond issues and sale-lease back arrangements, both from the financing as well as the investment perspective. German banks could also be of service in arranging the actual construction of the planned facilities.

3.3 Bowling Centers

Brunswick presently owns and operates 12 bowling centers in Germany. The attached letter from J.H. Bennet, Jr., Vice President for Marketing, Brunswick Division, indicates Brunswick interest concerning the establishment of bowling centers on Army installations in Germany.

3.4 Construction Firms

Attached are letters from two of the leading construction firms in Germany, Bilfinger and Berger, and Philipp Holzmann. These firms are typical of the many large, multi-national construction companies in Germany that can plan, finance, construct and operate facilities in collaboration with other firms in both German private and public sectors.

3.5 Financing Options

There are a number of innovative methods of financing available to the Army in Germany similar to those in the United States including build to lease, traditional mortgages, bond issues and sale-lease back. Various levels of operational responsibility by the contractor are also available in Germany.

3.6 Design Considerations

The Army can opt to manage design or to have the contractor responsible for managing both design and construction. When the contractor has design responsibility, the Army may select the options of providing a statement of functional requirements, standard drawings, or a 35 percent concept design. Many of the large German construction companies can provide full "design and build" turnkey projects.

4. Special Legal/Tax Issues in Germany

4.1 General.

4.1.1. Background

On September 29, 1982, the U.S. Forces represented by HQ USAREUR, and the Federal Republic of Germany (FRG) represented by the Ministry of Construction, entered into a new agreement for the execution of U.S. Military Construction in the FRG. This agreement became effective October 1, 1982 and replaced the existing agreements which covered detailed working relationships for construction of U.S. military projects in Germany. The agreement is called ABG (Auftrasbauten-grundsaetze) - 75 because it was originally conceived and initially executed with the other NATO Sending States (Belguim, England, Canada, France and Holland) in 1975 and 1976.

4.1.2 Supplemental Agreement to the SOFA

ABG-75 is an Administrative Agreement which implements Article 49 of the Supplementary Agreement to the NATO Status of Forces Agreement (SA NATO SOFA). Article 49 established procedures for coordinating and executing construction works by NATO Sending States within the FRG.

The new Administrative Agreement ABG-75 states the basic principle that construction projects shall normally be carried out by German authorities, and provides for the coordination of the U.S. Forces funded construction programs.

4.1.3 NAFI Proposed Facilities Under ABG-75

The fact that the proposed construction of NAFI facilities will not be funded by the U.S. Forces could place the proposed construction under Part III, "Execution of construction by the Forces with their own personnel or labor employed by them or by direct contract," or could place the construction outside the ABG-75 altogether. If the construction is considered under ABG-75, it would likely be under Part III (Direct Procedure), Article 27.1.5, "Other new construction where it is so agreed." Article 30 provides procedures in the case of construction works covered by the provisions of Part III.

one bed and one of the second in Sections. However, to

4.1.4 Special Coordination with German Authorities

It appears, based on our investigations, that the proposed method of financing is unique to the U.S. Forces in Germany and to the ABG-75. Special coordination may be required between the U.S. Forces and the Federal Minister for Land Coordination, Construction and Town Building and the Federal Minister of Defense.

4.2 Tax Exempt Status

The U.S. Forces are exempt from German taxes under the Status of Forces Agreement. It is conceivable that exemption from the Added Value Tax (AVT), which amounts to 14 percent of construction costs, may be lost if construction is financed by the private sector. This matter may also require coordination with the German authorities.

5. Findings and Recommendations

5.1 Findings

This study revealed that there is private sector interest in the financing construction, and operation of NAFI facilities in Germany. The financing strategies defined in Delta's Final Report can also be applied in Germany. Both American and German investors/operators have indicated interest in participating in the proposed program.

5.2 Recommendations

5.2.1 Resolution of Applicability of ABG-75

The applicability of ABG-75 and the tax exempt status of proposed NAFI facililties should be resolved prior to advertising and/or entering into any contractual agreement for design or construction of the facilities. HQ, USAREUR, would be the appropriate representative of υ . S. Army Community and Family Support Center (USACFSC) to address this subject with the German authorities.

5.2.2 Facilities Common to Germany

Most of the proposed facilities in the USACFSC five-year plan are common to Germany, with the exception of U.S. style 10 pin bowling. It is recommended that projects be grouped by type and location (kaserne, city or state). When USACFSC is ready to proceed, an ad could be placed in a German newspaper read by most business people in Germany. A recommended newspaper is:

Frankfurter illgemeine Hellernof Strasse 2-4 6000 Frankfurt, Germany Telex #41223

5.2.3 Facilities Not Common to Germany

Since U.S. style 10-pin bowling is not common in Germany, it is recommended that Brunswick and AMF be invited to participate in building and operating NAFI Bowling Centers in Germany. Brunswick has constructed, owns and operates 12 bowling centers in Germany. None of these 12 are located on U.S. Forces installations.

APPENDIX A

TYPICAL LETTERS OF INTEREST

Deutsche Bank

Aktiengesellschaft



Mr. J. W. Morris, President J. W. Morris, Ltd. 3800 North Fairfax Drive Suite 7 Arlington, VA 22203

New York Branch

9 West 57th Street New York, N.Y. 10018 F.O. Box 880 New York, N.Y. 10101 Telephone. (212) 940-8000

Toles WUI 649489 (international) TAT 177747 (international) WU 126109 (Demosic)

S.W.I.F T., DEUT US 33 Cable deutbenk newyork

والكين بيهوالا

Your reference and date

Direct diel

Date

CD-1/ME/rhl

940 -8028

April 12, 1985

Dear Mr. Morris:

We have received your inquiry with respect to a study concerning the financing of Non-Appropriated Fund (NAF) major construction in Germany. The strategies under consideration as described in your memo are generally feasible under German financing and tax regulations. Deutsche Bank AG would like to take a closer look on any of the strategies outlined once the Army Adjutant General has indicated a preference for any particular aspect. You are most probably aware that Germany has a so-called "universal banking principle;" it would thus be possible for us to provide traditional permanent mortgages as well as bond issues and, sale-leaseback arrangements, both from the financing as well as the investment perspective. We are furthermore a shareholder in one of Germany's largest construction companies, and could thus even be of service in arranging the actual construction of the planned facilities.

we understand that you are currently in a preliminary analytical stage. Please feel free to contact us should you need assistance with respect to particular questions. We would like to be of service as soon as the scope of the alternatives has been narrowed down. We remain

With kind regards,

Deutsche Bank AG New York Branch

D. Staecker

Executive Vice President

M. Ernestus Vice President



J.H BENNETT, JR. Vice President Marketing

April 12, 1985

Mr. Norman Howard J. W. Morris, Ltd. 3800 North Fairfax Drive Suite 7 Arlington, VA 22203

Dear Mr. Howard:

I enjoyed speaking with you this morning and this letter will serve as Brunswick's interest, along with Werner-Herbison-Padgett in pursuing further discussions regarding your project concerning the establishment of bowling centers on government installations in the European market.

As Mr. Padgett indicated to you, he has had experience in the international market along these lines.

We will now await word from you as to a meeting to discuss this project in more detail.

Sincerely,

D

JHB:sm

cc....Mr. B. L. Padgett



J.W. Morris, Ltd. 3800 N.Fairfax Orive Suite 7

Arlington, Virginia 22203

USA

Niederlassung Frankturt

Lyoner Straße 38 a Postfach 71 01 55 6000 Frankfurt 71 Niederrad

Telefon (089) 6688-0 Teletax 68 88 320 Telex 414 328 bub d Kabei bilberg-frankfurt

inra Zachan

thre Nacaricht vom

Unser Zeichen

Darson 1

Fa/Th/We

April 12th, 1985

Barrad: New morale and welfare facilities for the U.S. Army - alternative financing strategies

Dear Mr. Morris.

Thank you for your letter dated Feb. 22nd, 1985, adressed to Mr. Bubenik at our Overseas Department, Wiesbaden.

Mr. Bubenik has referred your letter to this office, as it is this office which is charged with the responsibility of coordinating all enquiries from the U.S. Forces.

As one of the leading German Construction Companies we can look back to many years of experience in all fields of construction. We can offer all the necessary facilities of feasibility study preparation, design, testing and final execution of projects including conventional measurement contracts and full "design and build" turnkey projects.

We have experience of land procurement, project development and operation. Although we are fundamentally a construction company we have nevertheless many contacts in all associated industries and can engage and coordinate the activities of such specialist manufacturing and service companies as may be needed for a large scale project. In addition we have first class connections with the major German Banks.

In recent years we have noted many developments in marketing methods and have devised and employed financing

Aniagen:

/2..



Blatt: 2 zum Schreiben vom: 04/12/85

an: J.W. Morris, Ltd.

techniques and models similar to the strategies you have described in your letter.

There can be little doubt that in the coming years the concept of combined planning, financing, construction and operation of many and varied facilities in both german private and public sectors will be employed with increasing frequency. The various possibilities which can be considered are varied and complex and, of course, the maximum adventages are to be gained from large and extensive investment programmes.

We would like to confirm, indeed to emphasize, our interest in your proposals and our willingness to participate in such a scheme when your study is complete and when you are able to further define your objectives.

As we have indicated we are familiar with the financing strategies you have described. It is not prudent, of course, to attempt to distinguish between them in terms of adventage and disadventage until it is possible to consider alternative application to a particular project in particular location; then indeed it would be possible to consider the specific effects of differing tax negotiations as they apply. We have within our organisation a specialist group "Projekt-Cruppe-Privatisierung" which is a group of people expert in the interpretation of German financial and tax legislation: we would be willing to offer their services to you in respect of any such questions arising from your study. Alternatively, if you would like to suggest a particular project we could examine it and comment in specific rather than general terms.

Thank you once again for your letter; we hope that the foregoing comments will be of interest to you. We hope further that following the completion of your present study we can discuss again the different ways in which we may be able to assist you. At the appropriate time we would welcome an opportunity to meet and discuss this subject in greater detail.

Yours sincerely

BIH FIINGER + BERGER

BAUNKEIENGESELLSCHART

Nieda lassung Frankfurt

Documents showing the activities of our

PHILIPP HOLZMANN

Aktiengesellschaft

-71 Bur Howard

Philipp Holzmann AG - Postfach 11 09 33 - 6000 Frankfurt 11

J. W. Morris Ltd. 3800 N. Pairfax Drive Suite 7

Arlington/Virginia 22203

Hauptniederlassung Frankfurt



6000 Franklurt 1 Bethmannstraße 50-54 Telefon: (06 11) 2 62-1 Telex: 4 11 145-65 ph d

Telegramm: Holzphilag Frankfurtmain LZB Kto. 500 074 82 (BLZ 500 000 00)

ihre Zeichen

thre Nachricht vom

Unsere Zeichen

Teleton-Durchwahl

Tag

(06 11) 2 62-

639

April 15, 1985

HN Ffm. Sz/Lam BS 404

Your Letter from March 22, 1985

Gentlemen,

hereby we would like to express our interest in constructing these facilities as a potential general contractor and if required as a constructor for the basic structures only.

Because we are quite aware of the necessity to arrange for financing in that particular program we have secured the assistance of a developper here in Frankurt who has expressed his interest in financing and cooperation with our company.

In case we would form some kind of joint venture or similiar to cover the building activities and the financing as well.

As to the different methods of financing we feel it is to early to go into details, because the particular method depends on a lot of factors not yet known. Main problem in that respect is the Army's benefits not to be obliged to pay the AVT (Added Value Tax) on base of Government agreements which actually would lower the total investment cost by 14 %. Our potential partner is investigating methods to activate this difference even if the Army itself does not appear as investor.

For the moment being we have not yet received any information about results in that delicate matter.

Philipp Holzmann AG is one of the leading construction companies within Germany. At that point we just want to mention that J. A. Jones Construction Company at Charlotte/NC and Lockwood Green Engineers + Architects at Spartanburg/SC are subsidiaries of Philipp Holzmann AG.

Hoping that we can continue our dialogue in more details in the near future we remain

with kind regards

Truely yours

PHILIPP HOLIMANN
A VITE engabellachaft
Houpthiederlassung Prankfurt/Main

END

FILMED

1-86

DTIC